

# STATE OF MONTANA REQUEST FOR PROPOSAL (RFP)

RFP Number: RFP Title:

090192 Mount Haggin WMA Habitat Restoration Project

RFP Response Due Date and Time:

May 12, 2009 2:00 pm, Local Time

Number of Pages: 58

ISSUING AGENCY INFORMATION			
Procurement Officer: Rick Dorvall	Issue Date: April 17, 2009		
Fish Wildlife and Parks Procurement Officer: Rick Dorvall Address: P.O. Box 200701, 930 Custer Ave Telephone Number: (406) 495-3249 Fax Number: (406) 495-3253 E-mail Address: rdorvall@mt.gov	Phone: (406) 495-3249 Fax: (406) 495-3253 TTY Users, Dial 711		
	Website: http://www.fwp.mt.gov		

## **INSTRUCTIONS TO OFFERORS**

**Return Proposal to:** 

Montana Fish, Wildlife and Parks
Purchasing Office
P.O. Box 200701(Mailed)
930 Custer Avenue West (Delivered)
Helena, MT 59620-0701

Mark Face of Envelope/Package:

**RFP Number: 090192** 

RFP Response Due Date: May 12, 2009

**Special Instructions:** 

#### IMPORTANT: SEE STANDARD TERMS AND CONDITIONS

OFFERORS MUST COMPLETE THE FOLLOWING				
Offeror Name/Address:	Authorized Offeror Signatory:			
	(Diagon wint name and sinn in int)			
	(Please print name and sign in ink)			
Offeror Phone Number:	Offeror FAX Number:			
Offeror E-mail Address:				
Offeror E-mail Address.				
OFFERORS MUST RETURN THIS COVER SHEET WITH RFP RESPONSE				

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## **OFFEROR'S RFP CHECKLIST**

# The 10 Most Critical Things to Keep in Mind When Responding to an RFP for the State of Montana

Read the <u>entire</u> document. Note critical items such as: mandatory requirements; supplies/services required; submittal dates; number of copies required for submittal; funding amount and source; contract requirements (i.e., contract performance security, insurance requirements, performance and/or reporting requirements, etc.).
Note the procurement officer's name, address, phone numbers and e-mail address. This is the only person you are allowed to communicate with regarding the RFP and is an excellent source of information for any questions you may have.
Attend the pre-proposal conference if one is offered. These conferences provide an opportunity to ask clarifying questions, obtain a better understanding of the project, or to notify the State of any ambiguities, inconsistencies, or errors in the RFP.
Take advantage of the "question and answer" period. Submit your questions to the procurement officer by the due date listed in the Schedule of Events and view the answers given in the formal "addenda" issued for the RFP. All addenda issued for an RFP are posted on the State's website and will include all questions asked and answered concerning the RFP.
<b>Follow the format required in the RFP</b> when preparing your response. Provide point-by-point responses to all sections in a clear and concise manner.
Provide complete answers/descriptions. Read and answer all questions and requirements. Don't assume the State or evaluator/evaluation committee will know what your company capabilities are or what items/services you can provide, even if you have previously contracted with the State. The proposals are evaluated based solely on the information and materials provided in your response.
7. Use the forms provided, i.e., cover page, sample budget form, certification forms, etc.
Check the State's website for RFP addenda. Before submitting your response, check the State's website at <a href="http://www.fwp.mt.gov">http://www.fwp.mt.gov</a> to see whether any addenda were issued for the RFP. f so, you must submit a signed cover sheet for each addendum issued along with your RFP response.
Review and read the RFP document again to make sure that you have addressed all requirements. Your original response and the requested copies must be identical and be complete. The copies are provided to the evaluator/evaluation committee members and will be used to score your response.
<b>Submit your response on time.</b> Note all the dates and times listed in the Schedule of Events and within the document, and be sure to submit all required items on time. Late proposal responses are <i>never</i> accepted.

This checklist is provided for assistance only and should not be submitted with Offeror's Response.

## SCHEDULE OF EVENTS

EVENT	<u>DATE</u>
RFP Issue Date	April 17, 2009
Deadline for Receipt of Written Questions	April 28, 2009
Deadline for Posting of Written Responses to the Agencies' Website	May 1, 2009
RFP Response Due Date	May 12, 2009
Intended Date for Contract Award	week of May 25, 2009

#### **SECTION 1: PROJECT OVERVIEW AND INSTRUCTIONS**

#### 1.0 PROJECT OVERVIEW

The STATE OF MONTANA, Fish, Wildlife, & Parks, (hereinafter referred to as "the State") is seeking a Professional Forester to implement and provide oversight for habitat restoration plans for the Mount Haggin Wildlife Management Area (WMA), as described in the March 2009 Final Environmental Assessment for the "Mount Haggin WMA Habitat Restoration Project" (Appendix D). The Forester will aid the State in the selection of a logging contractor as well as other contractors as needed for full completion of the project. The Forester will provide oversight to the contractors' adherence to the objectives and habitat treatment prescriptions of the project. A more complete description of the supplies and/or services sought for this project is provided in Section 3, Scope of Project. Proposals submitted in response to this solicitation must comply with the instructions and procedures contained herein.

#### 1.1 CONTRACT TERM

The contract term is for a period of <u>18 months</u> beginning upon contract execution. Renewals of the contract, by mutual agreement of both parties, may be made at <u>6-month intervals</u>, or any interval that is advantageous to the State. This contract, including any renewals, may not exceed a total <u>of 3 years</u>, at the option of the State.

#### 1.2 SINGLE POINT OF CONTACT

From the date this Request for Proposal (RFP) is issued until an offeror is selected and the selection is announced by the procurement officer, offerors are not allowed to communicate with any state staff or officials regarding this procurement, except at the direction of <u>Rick Dorvall</u>, the procurement officer in charge of the solicitation. Any unauthorized contact may disqualify the offeror from further consideration. Contact information for the single point of contact is as follows:

Procurement Officer: Rick Dorvall
Address: P.O. Box 200701, 930 Custer Ave
Telephone Number: (406) 495-3249
Fax Number: (406) 495-3253
E-mail Address: rdorvall@mt.gov

## 1.3 REQUIRED REVIEW

1.3.1 Review RFP. Offerors should carefully review the instructions, mandatory requirements, specifications, standard terms and conditions, and contract set out in this RFP and promptly notify the procurement officer identified above in writing or via e-mail of any ambiguity, inconsistency, unduly restrictive specifications, or error which they discover upon examination of this RFP. This should include any terms or requirements within the RFP that either preclude the offeror from responding to the RFP or add unnecessary cost. This notification must be accompanied by an explanation and suggested modification and be received by the deadline for receipt of written or e-mailed inquiries set forth below. The State will make any final determination of changes to the RFP.

**1.3.2** Form of Questions. Offerors with questions or requiring clarification or interpretation of any section within this RFP must address these questions in writing or via e-mail to the procurement officer referenced above on or before **12 Noon April 28<sup>th</sup>**, **2009**. Each question must provide clear reference to the section, page, and item in question. Questions received after the deadline may not be considered.

1.3.3 State's Response. The State will provide an official written response by 5 pm May 1st, 2009 to all questions received by April 28<sup>th</sup>, 2009. The State's response will be by formal written addendum. Any other form of interpretation, correction, or change to this RFP will not be binding upon the State. Any formal written addendum will be posted on the State's website alongside the posting of the RFP at <a href="http://www.fwp.mt.gov">http://www.fwp.mt.gov</a> by the close of business on the date listed. Offerors must sign and return with their RFP response an Acknowledgment of Addendum for any addendum issued.

#### 1.4 GENERAL REQUIREMENTS

- 1.4.1 Acceptance of Standard Terms and Conditions/Contract. By submitting a response to this RFP, offeror agrees to acceptance of the standard terms and conditions and contract as set out in Appendices A and B of this RFP. Much of the language included in the standard terms and conditions and contract reflects requirements of Montana law. Requests for additions or exceptions to the standard terms and conditions, contract terms, including any necessary licenses, or any added provisions must be submitted to the procurement officer referenced above by the date for receipt of written/e-mailed questions and must be accompanied by an explanation of why the exception is being sought and what specific effect it will have on the offeror's ability to respond to the RFP or perform the contract. The State reserves the right to address non-material requests for exceptions with the highest scoring offeror during contract negotiation. Any material exceptions requested and granted to the standard terms and conditions and contract language will be addressed in any formal written addendum issued for this RFP and will apply to all offerors submitting a response to this RFP. The State will make any final determination of changes to the standard terms and conditions and/or contract.
- 1.4.2 Resulting Contract. This RFP and any addenda, the offeror's RFP response, including any amendments, a best and final offer, and any clarification question responses shall be included in any resulting contract. The State's contract, attached as Appendix B, contains the contract terms and conditions which will form the basis of any contract between the State and the highest scoring offeror. In the event of a dispute as to the duties and responsibilities of the parties under this contract, the contract, along with any attachments prepared by the State, will govern in the same order of precedence as listed in the contract.
- <u>1.4.3 Mandatory Requirements.</u> To be eligible for consideration, an offeror *must* meet the intent of all mandatory requirements. The State will determine whether an offeror's RFP response complies with the intent of the requirements. RFP responses that do not meet the full intent of all requirements listed in this RFP may be subject to point reductions during the evaluation process or may be deemed non-responsive.
- **1.4.4 Understanding of Specifications and Requirements.** By submitting a response to this RFP, offeror agrees to an understanding of and compliance with the specifications and requirements described in this RFP.
- 1.4.5 Prime Contractor/Subcontractors. The highest scoring offeror will be the prime contractor if a contract is awarded and shall be responsible, in total, for all work of any subcontractors. All subcontractors, if any, must be listed in the proposal. The State reserves the right to approve all subcontractors. The Contractor shall be responsible to the State for the acts and omissions of all subcontractors or agents and of persons directly or indirectly employed by such subcontractors, and for the acts and omissions of persons employed directly by the Contractor. Further, nothing contained within this document or any contract documents created as a result of any contract awards derived from this RFP shall create any contractual relationships between any subcontractor and the State.
- <u>1.4.6 Offeror's Signature.</u> The proposals must be signed in ink by an individual authorized to legally bind the business submitting the proposal. The offeror's signature on a proposal in response to this RFP guarantees that the offer has been established without collusion and without effort to preclude the State of Montana from obtaining the best possible supply or service. Proof of authority of the person signing the RFP response must be furnished upon request.
- <u>1.4.7 Offer in Effect for 120 Days.</u> A proposal may not be modified, withdrawn or canceled by the offeror for a 120-day period following the deadline for proposal submission as defined in the Schedule of Events, or receipt of best and final offer, if required, and offeror so agrees in submitting the proposal.

#### 1.5 SUBMITTING A PROPOSAL

- <u>1.5.1</u> Failure to Comply with Instructions. Offerors failing to comply with these instructions may be subject to point deductions. The State may also choose to not evaluate, may deem non-responsive, and/or may disqualify from further consideration any proposals that do not follow this RFP format, are difficult to understand, are difficult to read, or are missing any requested information.
- **1.5.2 Multiple Proposals.** Offerors may, at their option, submit multiple proposals, in which case each proposal shall be evaluated as a separate document.
- 1.5.3 Copies Required and Deadline for Receipt of Proposals. Offerors must submit one original proposal and (4) four copies to Fish Wildlife and Parks, Purchasing Office, P O Box 200701, 930 Custer Ave, Helena MT 59601. PROPOSALS MUST BE SEALED AND LABELED ON THE OUTSIDE OF THE PACKAGE to clearly indicate that they are in response to RFP#090192. Proposals must be received at Fish Wildlife and Parks, Purchasing Office prior to 2:00 p.m., Mountain Time, May 12, 2009. Facsimile responses to requests for proposals are ONLY accepted on an exception basis with prior approval of the procurement officer.
- <u>1.5.4 Late Proposals.</u> Regardless of cause, late proposals will not be accepted and will automatically be disqualified from further consideration. It shall be the offeror's sole risk to assure delivery at the receptionist's desk at the designated office by the designated time. Late proposals will not be opened and may be returned to the offeror at the expense of the offeror or destroyed if requested.

#### 1.6 COST OF PREPARING A PROPOSAL

- <u>1.6.1</u> State Not Responsible for Preparation Costs. The costs for developing and delivering responses to this RFP and any subsequent presentations of the proposal as requested by the State are entirely the responsibility of the offeror. The State is not liable for any expense incurred by the offeror in the preparation and presentation of their proposal or any other costs incurred by the offeror prior to execution of a contract.
- <u>1.6.2 All Timely Submitted Materials Become State Property.</u> All materials submitted in response to this RFP become the property of the State and are to be appended to any formal documentation, which would further define or expand any contractual relationship between the State and offeror resulting from this RFP process.

#### **SECTION 2: RFP STANDARD INFORMATION**

## 2.0 AUTHORITY

This RFP is issued under the authority of section 18-4-304, MCA (Montana Code Annotated) and ARM 2.5.602 (Administrative Rules of Montana). The RFP process is a procurement option allowing the award to be based on stated evaluation criteria. The RFP states the relative importance of all evaluation criteria. No other evaluation criteria, other than as outlined in the RFP, will be used.

## 2.1 OFFEROR COMPETITION

The State encourages free and open competition among offerors. Whenever possible, the State will design specifications, proposal requests, and conditions to accomplish this objective, consistent with the necessity to satisfy the State's need to procure technically sound, cost-effective services and supplies.

#### 2.2 RECEIPT OF PROPOSALS AND PUBLIC INSPECTION

- **2.2.1 Public Information.** All information received in response to this RFP, including copyrighted material, is deemed public information and will be made available for public viewing and copying shortly after the time for receipt of proposals has passed with the following three exceptions: (1) bona fide trade secrets meeting the requirements of the Uniform Trade Secrets Act, Title 30, chapter 14, part 4, MCA, that have been properly marked, separated, and documented; (2) matters involving individual safety as determined by the State; and (3) other constitutional protections. See Mont. Code Ann. § 18-4-304.
- <u>2.2.2 Procurement Officer Review of Proposals.</u> Upon opening the proposals received in response to this RFP, the procurement officer in charge of the solicitation will review the proposals and separate out any information that meets the referenced exceptions in Section 2.2.1 above, providing the following conditions have been met:
- Confidential information is clearly marked and separated from the rest of the proposal.
- The proposal does not contain confidential material in the cost or price section.
- An affidavit from an offeror's legal counsel attesting to and explaining the validity of the trade secret claim as set out in Title 30, chapter 14, part 4, MCA, is attached to each proposal containing trade secrets. Counsel must use the State of Montana "Affidavit for Trade Secret Confidentiality" form in requesting the trade secret claim. This affidavit form is available on the General Services Division's website at: <a href="http://www.mt.gov/doa/gsd/procurement/forms.asp">http://www.mt.gov/doa/gsd/procurement/forms.asp</a> or by calling (406) 444-2575.

Information separated out under this process will be available for review only by the procurement officer, the evaluator/evaluation committee members, and limited other designees. Offerors must be prepared to pay all legal costs and fees associated with defending a claim for confidentiality in the event of a "right to know" (open records) request from another party.

## 2.3 CLASSIFICATION AND EVALUATION OF PROPOSALS

- <u>2.3.1 Initial Classification of Proposals as Responsive or Nonresponsive.</u> All proposals will initially be classified as either "responsive" or "nonresponsive," in accordance with ARM 2.5.602. Proposals may be found nonresponsive at any time during the procurement process if any of the required information is not provided; the submitted price is found to be excessive or inadequate as measured by criteria stated in the RFP; or the proposal is not within the plans and specifications described and required in the RFP. If a proposal is found to be nonresponsive, it will not be considered further.
- **2.3.2 Determination of Responsibility.** The procurement officer will determine whether an offeror has met the standards of responsibility in accordance with ARM 2.5.407. Such a determination may be made at any time during the procurement process if information surfaces that would result in a determination of nonresponsibility. If an offeror is found nonresponsible, the determination must be in writing, made a part of the procurement file and mailed to the affected offeror.
- **2.3.3** Evaluation of Proposals. An evaluator/evaluation committee will evaluate the remaining proposals and recommend whether to award the contract to the highest scoring offeror or, if necessary, to seek discussion/negotiation or a best and final offer in order to determine the highest scoring offeror. All responsive proposals will be evaluated based on stated evaluation criteria. In scoring against stated criteria, the State may consider such factors as accepted industry standards and a comparative evaluation of all other qualified RFP responses in terms of differing price, quality, and contractual factors. These scores will be used to determine the most advantageous offering to the State. If an evaluation committee meets to deliberate and evaluate the proposals, the public may attend and observe the evaluation committee deliberations.
- <u>2.3.4 Completeness of Proposals.</u> Selection and award will be based on the offeror's proposal and other items outlined in this RFP. Submitted responses may not include references to information located elsewhere, such as Internet websites or libraries, unless specifically requested. Information or

materials presented by offerors outside the formal response or subsequent discussion/negotiation or "best and final offer," if requested, will not be considered, will have no bearing on any award, and may result in the offeror being disqualified from further consideration.

- 2.3.5 Opportunity for Discussion/Negotiation and/or Oral Presentation/Product
- <u>Demonstration.</u> After receipt of all proposals and prior to the determination of the award, the State may initiate discussions with one or more offerors should clarification or negotiation be necessary. Offerors may also be required to make an oral presentation and/or product demonstration to clarify their RFP response or to further define their offer. In either case, offerors should be prepared to send qualified personnel to Helena, Montana, to discuss technical and contractual aspects of the proposal. Oral presentations and product demonstrations, if requested, shall be at the offeror's expense.
- **2.3.6 Best and Final Offer.** The "Best and Final Offer" is an option available to the State under the RFP process, which permits the State to request a "best and final offer" from one or more offerors if additional information is required to make a final decision. Offerors may be contacted asking that they submit their "best and final offer," which must include any and all discussed and/or negotiated changes. The State reserves the right to request a "best and final offer" for this RFP, if any, based on price/cost alone.
- **2.3.7** Evaluator/Evaluation Committee Recommendation for Contract Award. The evaluator/evaluation committee will provide a written recommendation for contract award to the procurement officer that contains the scores, justification and rationale for the decision. The procurement officer will review the recommendation to ensure its compliance with the RFP process and criteria before concurring in the evaluator's/evaluation committee's recommendation.
- **2.3.8 Request for Documents Notice.** Upon concurrence with the evaluator's/evaluation committee's recommendation for contract award, the procurement officer will issue a "Request for Documents Notice" to the highest scoring offeror to obtain the required insurance documents, contract performance security, an electronic copy of any requested material, i.e., response to clarification questions and/or Best and Final Offer, and any other necessary documents. Receipt of the "Request for Documents Notice" does not constitute a contract and no work may begin until a contract signed by all parties is in place. The procurement officer will notify all other offerors of the State's intent to begin contract negotiation with the highest scoring offeror.
- **2.3.9 Contract Negotiation.** Upon issuance of the "Request for Documents Notice," the procurement officer and/or state agency representatives may begin contract negotiation with the responsive and responsible offeror whose proposal achieves the highest score and is, therefore, the most advantageous to the State. If contract negotiation is unsuccessful or the highest scoring offeror fails to provide necessary documents or information in a timely manner, or fails to negotiate in good faith, the State may terminate negotiations and begin negotiations with the next highest scoring offeror.
- **2.3.10 Contract Award.** Contract award, if any, will be made to the highest scoring offeror who provides all required documents and successfully completes contract negotiation. A formal contract utilizing the Contract attached as Appendix B and incorporating the Standard Terms and Conditions attached as Appendix A will be executed by all parties.

## 2.4 STATE'S RIGHTS RESERVED

While the State has every intention to award a contract as a result of this RFP, issuance of the RFP in no way constitutes a commitment by the State of Montana to award and execute a contract. Upon a determination such actions would be in its best interest, the State, in its sole discretion, reserves the right to:

- cancel or terminate this RFP (Mont. Code Ann. § 18-4-307);
- reject any or all proposals received in response to this RFP (ARM 2.5.602);
- waive any undesirable, inconsequential, or inconsistent provisions of this RFP which would not have significant impact on any proposal (ARM 2.5.505);
- not award if it is in the best interest of the State not to proceed with contract execution (ARM 2.5.602); or

• if awarded, terminate any contract if the State determines adequate state funds are not available (Mont. Code Ann. § 18-4-313).

#### **SECTION 3: SCOPE OF PROJECT**

## 3.0 Overview

The STATE OF MONTANA, Fish, Wildlife, & Parks, (hereinafter referred to as "the State") is seeking a Professional Forester to implement and provide oversight for habitat restoration plans for the Mount Haggin Wildlife Management Area (WMA), as outlined in the March 2009 Final Environmental Assessment for the "Mount Haggin WMA Habitat Restoration Project" (Appendix C). The Forester will aid the State in the selection of a logging contractor as well as other contractors as needed for full completion of the project. The Forester will provide oversight of the contractors' adherence to the objectives and habitat treatment prescriptions of the project. A more complete description of the supplies and/or services sought for this project is provided in Section 3, Scope of Project. Proposals submitted in response to this solicitation must comply with the instructions and procedures contained herein.

## 3.1 Location

Mount Haggin Wildlife Management Area is located approximately 15 miles west of Butte, MT. The project will occur on the northeast portion of the WMA. From Butte, proceed 12 miles West on Interstate 90. Take the Gregson exit and proceed southwesterly on Highway 144 approximately 2.5 miles. Turn at the Fairmont Hot Springs Resort General Store and proceed approximately 2 miles on the locally known German Gulch Road to the entrance to the WMA. This will allow access to the majority of the project area. To access the most westerly portions of the project, proceed past Fairmont Hot Springs Resort for 1.5 miles. Turn west at the intersection and proceed on Highway 144 for approximately 3 miles. Turn west onto Willow Glen Road. Go 1 mile. Turn south onto the Willow Creek public access road that cuts across Willow Glen Ranch, following this road for 2 miles to reach the project sites.

## 3.2 Scope of Project

Montana Fish, Wildlife, and Parks Department (FWP), Wildlife Division, hereafter referred to as "the State", seeks the services of a Professional Forester to implement and provide oversight for habitat restoration plans on a portion of the Mount Haggin WMA, as described in the March 2009 Final Environmental Assessment for the "Mount Haggin WMA Habitat Restoration Project" (Appendix C). There are three main objectives to the project:

- Objective 1: Reduce the expansion of Douglas fir within bitterbrush communities, in order to promote the health and regeneration of bitterbrush and associated plants important to wildlife.
- Objective 2: Reduce the expansion of Douglas fir and lodgepole pine within and surrounding aspen communities, in order to promote stand health and propagation of aspen.
- Objective 3: Remove stands of beetle-killed lodgepole pine in order to enhance the overall complexity of stand structure across the winter range, mitigate pine beetle infestation and improve forest health, and reduce forest fuel loads.

The selected Forester will be responsible for adhering to the prescriptions as described in the Final EA for the aspen and bitterbrush treatment areas, as well as designing the layout for the forest health treatment in accordance with the guidelines described in the Final EA. The selected Forester will be required to assist the State in administering a competitive bid process to locate a logging contractor to implement the aspen and forest health treatment prescriptions for the project. In addition, the selected Forester will be required to

locate a contractor to implement the bitterbrush treatment prescription and all other aspects of the project. The selected Forester will be required to monitor the progress and compliance of the contractors during pretreatment preparation, harvesting, clean up, and rehabilitation. The sale of commercial timber products will finance the actual logging, roadwork, clean up and rehabilitation of the project, in addition to the costs of implementing the bitterbrush treatment. The selected Forester will be required to market the timber products in the best interest of the State, account for income generated from the sale of timber products and the subsequent use of funds to pay for future needs related to the implementation of each treatment prescription, as well as for the actual implementation of the bitterbrush treatment prescription. Some examples of future needs would be slash management, rehabilitating new and existing logging roads used for this project, reseeding disturbed areas, and noxious weed control.

## 3.3 Habitat Treatment Prescriptions

Please refer to the Decision Notice and Section 2.1 Alternative A (Proposed Action) in the Draft Environmental Assessment found in Appendix C for details of the prescriptions for the Aspen and Bitterbrush Habitat Treatments, and for guidelines for the design of the Forest Health prescription.

## 3.4 Administration and Implementation of Operations

The selected Forester will be required to do the following:

- 1) Provide the design and layout for the Forest Health prescription in accordance with the guidelines in the Final Environmental Assessment (Appendix C).
- 2) Provide timber valuation estimates for the project.
- 3) Market the timber products in the best interests of the State.
- 4) Provide written cost estimates for full implementation of each prescription, including road construction, clean up, post-project weed management, rehabilitation to disturbed areas, etc.
- 5) Provide a competitive bid process following State processes and procedures in the locating of a suitable logging/clean up/rehabilitation contractor(s) to fully implement the Mount Haggin Habitat Restoration Project. All items must meet with the State of Montana contract requirements.
- 6) Provide contract administration with the prime contractor and any sub contractors that may be hired during this process. All items must meet with the State of Montana contract requirements.
- 7) Provide contract oversight and implementation during all phases of logging/clean up/rehabilitation activities. The Forester will act as the representative of the State during operations and will protect the State's interest as it applies to each part of the logging/clean up/rehabilitation process. The State will require on-site project oversight by the selected Forester, to verify that the State's interests are being monitored.
- 8) Provide monthly accounting to the State as it relates to cost estimates, revenue estimates, contract outlays, revenue generated, and general administration of revenue and payments as it relates to the implementation of the logging/clean up/rehabilitation efforts.
- 9) Maintain regular communication with the local FWP wildlife biologist to address any concerns with the project during and after the logging operations have been completed and to make any adjustments to the implementation of the project.
- 10) All costs of the logging/clean up/rehabilitation will be paid for through the sale of the timber products harvested from this project. The selected Forester will be required to administer and account for the funds in the best interest of the State.
- 11) All decisions regarding the selection of contractors, disbursement of funds, and all project administration shall be conveyed through the State. The State reserves the right to alter these decisions, as it deems necessary.

#### **SECTION 4: OFFEROR QUALIFICATIONS/INFORMATIONAL REQUIREMENTS**

## 4.0 STATE'S RIGHT TO INVESTIGATE AND REJECT

The State may make such investigations as deemed necessary to determine the ability of the offeror to provide the supplies and/or perform the services specified. The State reserves the right to reject any proposal if the evidence submitted by, or investigation of, the offeror fails to satisfy the State that the offeror is properly qualified to carry out the obligations of the contract. This includes the State's ability to reject the proposal based on negative references.

## 4.1 OFFEROR QUALIFICATIONS/INFORMATIONAL REQUIREMENTS

In order for the State to determine the capabilities of an offeror to provide the supplies and/or perform the services specified in Section 3 above, the offeror must respond to the following requests for information regarding its ability to meet the State's requirements. THE RESPONSE "(OFFEROR'S NAME) UNDERSTANDS AND WILL COMPLY" IS NOT APPROPRIATE FOR THIS SECTION.

NOTE: Each item must be thoroughly addressed. Offerors taking exception to any requirements listed in this section may be found non-responsive or be subject to point deductions.

## 4.2. Minimum Qualifications

- 4.2.1. Forester Representative will have a minimum of a B.S in Forestry or Wildlife Biology from an accredited University and 10 years of professional forestry work.
- 4.2.2 Demonstrated experience in log scale accounting, log marketing, preparation of log purchase agreements and timber harvest contracts, timber sale preparation, timber sale administration, slash management and road rehabilitation.

## 4.3. Technical Specifications

- 4.3.1 Performance period: Operations may begin immediately following award of the contract.
- 4.3.2 The Forester will complete timber sale layout and timber cruise by June 10th, 2009.
- 4.3.3 Forester will conduct a walk-through of the project area for prospective logging contractors, in June of 2009.
- 4.3.4 Log purchase agreements, a harvest contract, and the selection of a logging contractor will be signed and completed by July 31<sup>st</sup>, 2009.
- 4.3.5 The Forester will select a contractor to conduct the bitterbrush treatment prescription, and the selection will be signed and completed by July 31<sup>st</sup>, 2009.
- 4.3.6 All major timber removal activities shall be completed before December 1<sup>st</sup>, 2009, preferably by September 30<sup>th</sup>, 2009.

## 4.4. Offeror Qualifications

#### 4.4.1. References

Offeror shall provide a minimum of three (<u>3)</u> references that are using services of the type proposed in this RFP. The references may include state government or universities where the offeror, preferably within the

last three (<u>3)</u> years, has successfully complete similar types of work. At a minimum, the offeror shall provide the company name, the location where the services were provided, contact person(s), customer's telephone number, e-mail address, and a complete description of the service type, and dates the services were provided. These references may be contacted to verify offeror's ability to perform the contract. The State reserves the right to use any information or additional references deemed necessary to establish the ability of the offeror to perform the conditions of the contract. Negative references may be grounds for proposal disqualification.

#### 4.4.2. Company Profile and Experience

Contractor representative must have a minimum of ten (<u>10</u>) years professional timber harvesting experience. Contractor must have demonstrated experience in all aspects of logging including felling, yarding, processing, and hauling of saw logs and pulpwood.

Offeror shall specify how long the individual/company submitting the proposal has been in the business of providing supplies and/or services similar to those requested in this RFP and under what company name. Offeror should provide a complete description of any relevant past projects, within the past five (<u>5</u>) years, including the supply/service type and dates the supplies and/or services were provided.

#### 4.4.3. Staff Qualifications/Resumes

A resume or summary of qualifications, work experience, education, skills, etc., which emphasizes previous experience in this area should be provided for all key personnel who will be involved with any aspects of the contract.

## 4.5. Methods of Providing Services

#### 4.5.1 Work Plan

Within this plan please describe your methodology for addressing the following integral components of this project:

- a) Harvest planning and equipment and system selection
- b) Merchandizing and marketing the timber products
- c) Log scale accounting and analysis of price proposals
- d) Timber sale preparation and administration
- e) Road construction and subsequent rehabilitation/ reseeding with native species
- f) Slash management/erosion control
- g) Implementation of Douglas fir removal from bitterbrush stands
- h) Noxious weed control

#### 4.5.2 Accounting and Reporting Procedures

The sale of commercial timber products is anticipated to be greater than the overall project costs. The Department must approve all decisions regarding disbursement or allocation of funds.

- a) Describe what accounting system will be used to account for the reporting of harvest volume and the income it generates?
- b) Describe how the money generated from the sale of timber products will be retained, accounted for, and used for future project costs (slash disposal, weed control, Douglas fir removal from bitterbrush stands, etc)?
- c) Describe how you will administer the budget to ensure that the timber harvesting, clean up, road construction and rehabilitation, bitterbrush treatment prescription, and noxious weed costs of this project do not outstrip the anticipated income from the sale of the timber products?

## 4.6 COST PROPOSAL

The offeror shall provide a project cost for implementation and oversight of all aspects of the Mount Haggin Habitat Restoration Project as a whole. Included in the cost should be an estimated timeline for completion of each aspect of the project.

## **SECTION 5: EVALUATION PROCESS**

## 5.0 BASIS OF EVALUATION

The evaluator/evaluation committee will review and evaluate the offers according to the following criteria based on a total number of 1000 points.

#### 5.1 EVALUATION CRITERIA

The evaluation committee will review and evaluate the offers according to the following criteria based on a maximum possible value of 1000 points. The References, Company Profile and Experience, Qualifications/Resume, and Method of Providing Services portions of the offer will be evaluated based on the following Scoring Guide, while the Cost Proposal will be evaluated based on the formula set below.

Offeror Name:	Points Awarded
---------------	----------------

Category	Section	Possible Points	Points Awarded	Comments
QUALIFICATIONS	References Provided = Pass; References Not Provided - Fail			s Not Provided - Fail
A. Meets Minimum Qualifications	4.2.1 4.2.2	Pass/Fail		
RESUMES/COMPANY PROFILE AND EXPERIENCE				
A. References	4.4.1	50		
B. Company Profile and Experience	4.4.2	125		
C. Staff Qualifications	4.4.3	75		
METHOD OF PROVIDING SERVICES				
Methods/ Work Plan	4.5.1	368		
a-h: each category worth 46 points	4 5 0	420		
Reporting/Accounting Methods	4.5.2	132		
a-c: each category worth 44 points				
COST OF PROPOSAL				
A. Cost of Proposal B. Time Line		*200 50		

\* Lowest overall cost receives the maximum allotted points. All other offerors receive a percentage of the points available based on their cost relationship to the lowest.

Example: Total possible points for cost is 200.

Offeror A's cost is \$10,000. Offeror B's cost is \$15,000.

Offeror A would receive 200 points

Offeror B would receive 130 points (\$10,000/\$15,000 = 67% x 200 points = 130).

#### APPENDIX A: STANDARD TERMS AND CONDITIONS

#### **Standard Terms and Conditions**

By submitting a response to this invitation for bid, request for proposal, limited solicitation, or acceptance of a contract, the vendor agrees to acceptance of the following Standard Terms and Conditions and any other provisions that are specific to this solicitation or contract.

**ACCEPTANCE/REJECTION OF BIDS, PROPOSALS, OR LIMITED SOLICITATION RESPONSES:** The State reserves the right to accept or reject any or all bids, proposals, or limited solicitation responses, wholly or in part, and to make awards in any manner deemed in the best interest of the State. Bids, proposals, and limited solicitation responses will be firm for 30 days, unless stated otherwise in the text of the invitation for bid, request for proposal, or limited solicitation.

ACCESS AND RETENTION OF RECORDS: The contractor agrees to provide the department, Legislative Auditor, or their authorized agents, access to any records necessary to determine contract compliance (Mont. Code Ann. § 18-1-118). The contractor agrees to create and retain records supporting the services rendered or supplies delivered for a period of three years after either the completion date of the contract or the conclusion of any claim, litigation, or exception relating to the contract taken by the State of Montana or third party.

**ALTERATION OF SOLICITATION DOCUMENT:** In the event of inconsistencies or contradictions between language contained in the State's solicitation document and a vendor's response, the language contained in the State's original solicitation document will prevail. Intentional manipulation and/or alteration of solicitation document language will result in the vendor's disqualification and possible debarment.

**ASSIGNMENT, TRANSFER AND SUBCONTRACTING:** The contractor shall not assign, transfer or subcontract any portion of the contract without the express written consent of the department. (Mont. Code Ann. § 18-4-141.) **AUTHORITY:** The following bid, request for proposal, limited solicitation, or contract is issued under authority of Title 18, Montana Code Annotated, and the Administrative Rules of Montana, Title 2, chapter 5.

**COMPLIANCE WITH LAWS:** The contractor must, in performance of work under the contract, fully comply with all applicable federal, state, or local laws, rules and regulations, including the Montana Human Rights Act, the Civil Rights Act of 1964, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Any subletting or subcontracting by the contractor subjects subcontractors to the same provision. In accordance with section 49-3-207, MCA, the contractor agrees that the hiring of persons to perform the contract will be made on the basis of merit and qualifications and there will be no discrimination based upon race, color, religion, creed, political ideas, sex, age, marital status, physical or mental disability, or national origin by the persons performing the contract.

**CONFORMANCE WITH CONTRACT:** No alteration of the terms, conditions, delivery, price, quality, quantities, or specifications of the contract shall be granted without prior written consent of the State Procurement Bureau. Supplies delivered which do not conform to the contract terms, conditions, and specifications may be rejected and returned at the contractor's expense.

**DEBARMENT:** The contractor certifies, by submitting this bid or proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction (contract) by any governmental department or agency. If the contractor cannot certify this statement, attach a written explanation for review by the State.

**DISABILITY ACCOMMODATIONS:** The State of Montana does not discriminate on the basis of disability in admission to, access to, or operations of its programs, services, or activities. Individuals, who need aids, alternative document formats, or services for effective communications or other disability-related accommodations in the programs and services offered, are invited to make their needs and preferences known to this office. Interested parties should provide as much advance notice as possible.

**FACSIMILE RESPONSES:** Facsimile responses will be accepted for invitations for bids, small purchases or limited solicitations ONLY if they are completely <u>received</u> by the Procurement Office prior to the time set for receipt. Bids, or portions thereof, received after the due time will not be considered. Facsimile responses to requests for proposals are ONLY accepted on an <u>exception</u> basis with <u>prior approval</u> of the procurement officer.

**FAILURE TO HONOR BID/PROPOSAL:** If a bidder/offeror to whom a contract is awarded refuses to accept the award (PO/contract) or, fails to deliver in accordance with the contract terms and conditions, the department may, in its discretion, suspend the bidder/offeror for a period of time from entering into any contracts with the State of Montana.

**FORCE MAJEURE:** Neither party shall be responsible for failure to fulfill its obligations due to causes beyond its reasonable control, including without limitation, acts or omissions of government or military authority, acts of God, materials shortages, transportation delays, fires, floods, labor disturbances, riots, wars, terrorist acts, or any other causes, directly or indirectly beyond the reasonable control of the non-performing party, so long as such party is using its best efforts to remedy such failure or delays.

**HOLD HARMLESS/INDEMNIFICATION:** The contractor agrees to protect, defend, and save the State, its elected and appointed officials, agents, and employees, while acting within the scope of their duties as such, harmless from and against all claims, demands, causes of action of any kind or character, including the cost of defense thereof, arising in favor of the contractor's employees or third parties on account of bodily or personal injuries, death, or damage to property arising out of services performed or omissions of services or in any way resulting from the acts or omissions of the contractor and/or its agents, employees, representatives, assigns, subcontractors, except the sole negligence of the State, under this agreement.

**LATE BIDS AND PROPOSALS:** Regardless of cause, late bids and proposals will not be accepted and will automatically be disqualified from further consideration. It shall be solely the vendor's risk to assure delivery at the designated office by the designated time. Late bids and proposals will not be opened and may be returned to the vendor at the expense of the vendor or destroyed if requested.

**PAYMENT TERM:** All payment terms will be computed from the date of delivery of supplies or services OR receipt of a properly executed invoice, whichever is later. Unless otherwise noted in the solicitation document, the State is allowed 30 days to pay such invoices. All contractors will be required to provide banking information at the time of contract execution in order to facilitate State electronic funds transfer payments.

**RECIPROCAL PREFERENCE:** The State of Montana applies a reciprocal preference against a vendor submitting a bid from a state or country that grants a residency preference to its resident businesses. A reciprocal preference is only applied to an invitation for bid for supplies or an invitation for bid for nonconstruction services for public works as defined in section 18-2-401(9), MCA, and then only if federal funds are not involved. For a list of states that grant resident preference, seehttp://www.mt.gov/doa/gsd/procurement/reciprocalpreference.asp.

**REFERENCE TO CONTRACT:** The contract or purchase order number MUST appear on all invoices, packing lists, packages and correspondence pertaining to the contract.

**REGISTRATION WITH THE SECRETARY OF STATE:** Any business intending to transact business in Montana must register with the Secretary of State. Businesses that are incorporated in another state or country, but which are conducting activity in Montana, must determine whether they are transacting business in Montana in accordance with sections 35-1-1026 and 35-8-1001, MCA. Such businesses may want to obtain the guidance of their attorney or accountant to determine whether their activity is considered transacting business.

If businesses determine that they are transacting business in Montana, they must register with the Secretary of State and obtain a certificate of authority to demonstrate that they are in good standing in Montana. To obtain registration materials, call the Office of the Secretary of State at (406) 444-3665, or visit their website at <a href="http://www.sos.state.mt.us">http://www.sos.state.mt.us</a>. **SEPARABILITY CLAUSE:** A declaration by any court, or any other binding legal source, that any provision of the contract is illegal and void shall not affect the legality and enforceability of any other provision of the contract, unless the provisions are mutually dependent.

SHIPPING: Supplies shall be shipped prepaid, F.O.B. Destination, unless the contract specifies otherwise.

**SOLICITATION DOCUMENT EXAMINATION:** Vendors shall promptly notify the State of any ambiguity, inconsistency, or error, which they may discover upon examination of a solicitation document.

**TAX EXEMPTION:** The State of Montana is exempt from Federal Excise Taxes (#81-0302402).

**TECHNOLOGY ACCESS FOR BLIND OR VISUALLY IMPAIRED:** Contractor acknowledges that no state funds may be expended for the purchase of information technology equipment and software for use by employees, program participants, or members of the public unless it provides blind or visually impaired individuals with access, including interactive use of the equipment and services, that is equivalent to that provided to individuals who are not blind or visually impaired. (Mont. Code Ann. § 18-5-603.) Contact the State Procurement Bureau at (406) 444-2575 for more information concerning nonvisual access standards.

**TERMINATION OF CONTRACT:** Unless otherwise stated, the State may, by written notice to the contractor, terminate the contract in whole or in part at any time the contractor fails to perform the contract.

**UNAVAILABILITY OF FUNDING:** The contracting agency, at its sole discretion, may terminate or reduce the scope of the contract if available funding is reduced for any reason. (Mont. Code Ann. § 18-4-313(4).)

**U.S. FUNDS:** All prices and payments must be in U.S. dollars.

**VENUE:** This solicitation is governed by the laws of Montana. The parties agree that any litigation concerning this bid, request for proposal, limited solicitation, or subsequent contract, must be brought in the First Judicial District in and for the County of Lewis and Clark, State of Montana, and each party shall pay its own costs and attorney fees. (Mont. Code Ann. § 18-1-401.)

**WARRANTIES:** The contractor warrants that items offered will conform to the specifications requested, to be fit and sufficient for the purpose manufactured, of good material and workmanship and free from defect. Items offered must be new and unused and of the latest model or manufacture, unless otherwise specified by the State. They shall be equal in quality and performance to those indicated herein. Descriptions used herein are specified solely for the purpose of indicating standards of quality, performance and/or use desired. Exceptions will be rejected.

#### APPENDIX B: CONTRACT

#### Mount Haggin WMA Habitat Restoration Project

(CONTRACT NUMBER)

#### 1. PARTIES

THIS CONTRACT, is entered into by and between the State of Montana Fish, Wildlife, & Parks, Wildlife Division, (hereinafter referred to as "the State"), whose address and phone number are P.O. Box 200701, 1420 E. Sixth Ave, Helena MT, (406) 444-3704 and (insert name of contractor), (hereinafter referred to as the "Contractor"), whose address and phone number are (insert address) and (insert phone number).

#### THE PARTIES AGREE AS FOLLOWS:

#### 2. <u>EFFECTIVE DATE, DURATION, AND RENEWAL</u>

- **2.1** Contract Term. This contract shall take effect on (insert date), 2009, (or upon contract execution) and terminate on (insert date), 20(), unless terminated earlier in accordance with the terms of this contract. (Mont. Code Ann. § 18-4-313.)
- **2.2** Contract Renewal. This contract may, upon mutual agreement between the parties and according to the terms of the existing contract, be renewed in 6-month intervals, or any interval that is advantageous to the State. This contract, including any renewals, may not exceed a total of 3 years.

#### 3. COST/PRICE ADJUSTMENTS

3.1 Price Adjustments Negotiated Based on Changes in Contractor's Costs. Price adjustments may be permitted at the time of contract renewal through a process of negotiation with the Contractor and the State. Any adjustments will be subject to approval by the Parks Division Assistant Administrator.

#### 4. SERVICES AND/OR SUPPLIES

Contractor agrees to provide to the State the following:

- 4.1 On site investigation and design for removal of beetle-killed lodge pole pine trees as part of the Forest Health Treatment Prescription, such as fuel reduction/defensible space project layout, delineation of openings and retention areas, tree marking, and other miscellaneous layout for a successful project.
- 4.2 Written prescriptive alternatives and maps for mechanical tree harvesting that are consistent with the goals and objectives of the outcome of the Environmental Assessment process.
- 4.3 Providing the State with a competitive bid process in the selection of prospective Logging contractors.
- 4.4 Oversight, monitoring and compliance of successful logging contractor during harvesting and clean up that are consistent with the goals and objectives of the outcome of the Environmental Assessment process.
- 4.5 The merchandizing/marketing, accounting, and analysis of timber sale preparation and administration that is consistent with the goals and objectives of the outcome of the Environmental Assessment process.
- 4.6 The oversight, monitoring and compliance of the Logging contractors slash management and clean up after harvesting that is consistent with the goals and objectives of the outcome of the Environmental Assessment process.

4.7 A creation of a detailed plan for the future needs of the Parks forest relating to rehabilitation, reforestation with native species, and noxious weed control that is consistent with the goals and objectives of the outcome of the Environmental Assessment process. Also, the administration and implementation of each plan.

#### 5. <u>CONSIDERATION/PAYMENT</u>

- <u>5.1</u> Payment Schedule. In consideration for the implementation of the Mount Haggin WMA Habitat Restoration Project, the State shall pay a percentage of the total contract cost in relation to the progress of the completed portions of this contract. All decisions concerning progress and pay estimates will be made by the State.
- <u>5.2 Withholding of Payment.</u> The State may withhold payments to the Contractor if the Contractor has not performed in accordance with this contract. Such withholding cannot be greater than the additional costs to the State caused by the lack of performance.

#### 6. ACCESS AND RETENTION OF RECORDS

- **6.1** Access to Records. The Contractor agrees to provide the State, Legislative Auditor or their authorized agents access to any records necessary to determine contract compliance. (Mont. Code Ann. § 18-1-118.)
- **6.2** Retention Period. The Contractor agrees to create and retain records supporting the Mount Haggin WMA Habitat Restoration Project for a period of three years after either the completion date of this contract or the conclusion of any claim, litigation or exception relating to this contract taken by the State of Montana or a third party.

#### 7. ASSIGNMENT, TRANSFER AND SUBCONTRACTING

The Contractor shall not assign, transfer or subcontract any portion of this contract without the express written consent of the State. (Mont. Code Ann. § 18-4-141.) The Contractor shall be responsible to the State for the acts and omissions of all subcontractors or agents and of persons directly or indirectly employed by such subcontractors, and for the acts and omissions of persons employed directly by the Contractor. No contractual relationships exist between any subcontractor and the State.

#### 8. HOLD HARMLESS/INDEMNIFICATION

The Contractor agrees to protect, defend, and save the State, its elected and appointed officials, agents, and employees, while acting within the scope of their duties as such, harmless from and against all claims, demands, causes of action of any kind or character, including the cost of defense thereof, arising in favor of the Contractor's employees or third parties on account of bodily or personal injuries, death, or damage to property arising out of services performed or omissions of services or in any way resulting from the acts or omissions of the Contractor and/or its agents, employees, representatives, assigns, subcontractors, except the sole negligence of the State, under this agreement.

#### 9. REQUIRED INSURANCE

- **9.1 General Requirements.** The Contractor shall maintain for the duration of the contract, at its cost and expense, insurance against claims for injuries to persons or damages to property, including contractual liability, which may arise from or in connection with the performance of the work by the Contractor, agents, employees, representatives, assigns, or subcontractors. This insurance shall cover such claims as may be caused by any negligent act or omission.
- **9.2 Primary Insurance.** The Contractor's insurance coverage shall be primary insurance as respect to the State, its officers, officials, employees, and volunteers and shall apply separately to each

project or location. Any insurance or self-insurance maintained by the State, its officers, officials, employees or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

- **9.3** Specific Requirements for Commercial General Liability. The Contractor shall purchase and maintain occurrence coverage with combined single limits for bodily injury, personal injury, and property damage of \$500,000.00 per occurrence and \$1,000,000.00 aggregate per year to cover such claims as may be caused by any act, omission, or negligence of the Contractor or its officers, agents, representatives, assigns or subcontractors.
- **9.4** Additional Insured Status. The State, its officers, officials, employees, and volunteers are to be covered and listed as additional insureds; for liability arising out of activities performed by or on behalf of the Contractor, including the insured's general supervision of the Contractor; products and completed operations; premises owned, leased, occupied, or used.
- **9.5** Specific Requirements for Automobile Liability. The Contractor shall purchase and maintain coverage with split limits of \$500,000 per person (personal injury), \$1,000,000 per accident occurrence (personal injury), and \$100,000 per accident occurrence (property damage), OR combined single limits of \$1,000,000 to cover such claims as may be caused by any act, omission, or negligence of the contractor or its officers, agents, representatives, assigns or subcontractors.
- <u>9.6 Additional Insured Status.</u> The State, its officers, officials, employees, and volunteers are to be covered and listed as additional insureds for automobiles leased, hired, or borrowed by the Contractor.
- **9.7 Deductibles and Self-Insured Retentions.** Any deductible or self-insured retention must be declared to and approved by the state agency. At the request of the agency either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the State, its officers, officials, employees, or volunteers; or (2) at the expense of the Contractor, the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claims administration, and defense expenses.
- <u>9.8 Certificate of Insurance/Endorsements.</u> A certificate of insurance from an insurer with a Best's rating of no less than A- indicating compliance with the required coverages, must be received by Fish Wildlife and Parks, Purchasing Office. The Contractor must notify the State immediately, of any material change in insurance coverage, such as changes in limits, coverages, change in status of policy, etc. The State reserves the right to require complete copies of insurance policies at all times.

#### 10. COMPLIANCE WITH WORKERS' COMPENSATION ACT

Contractors are required to comply with the provisions of the Montana Workers' Compensation Act while performing work for the State of Montana in accordance with sections 39-71-401, 39-71-405, and 39-71-417, MCA. Proof of compliance must be in the form of workers' compensation insurance, an independent contractor's exemption, or documentation of corporate officer status. Neither the contractor nor its employees are employees of the State. This insurance/exemption must be valid for the entire term of the contract. A renewal document must be sent to the Fish Wildlife and Parks, Purchasing Office, upon expiration.

#### 11. COMPLIANCE WITH LAWS

The Contractor must, in performance of work under this contract, fully comply with all applicable federal, state, or local laws, rules and regulations, including the Montana Human Rights Act, the Civil Rights Act of 1964, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Any subletting or subcontracting by the Contractor subjects subcontractors to the same provision. In accordance with section 49-3-207, MCA, the Contractor agrees that the hiring of persons to perform the contract will be made on the basis of merit and qualifications and there will be no discrimination based upon race, color, religion, creed, political ideas, sex, age, marital status, physical or mental disability, or national origin by the persons performing the contract.

#### 12. CONTRACT TERMINATION

- **12.1 Termination for Cause.** The State may, by written notice to the Contractor, terminate this contract in whole or in part at any time the Contractor fails to perform this contract.
- 12.2 Reduction of Funding. The State, at its sole discretion, may terminate or reduce the scope of this contract if available funding is reduced for any reason. (See Mont. Code Ann. § 18-4-313(4).)

#### 13. LIAISON AND SERVICE OF NOTICES

All project management and coordination on behalf of the State shall be through a single point of contact designated as the State's liaison. Contractor shall designate a liaison that will provide the single point of contact for management and coordination of Contractor's work. All work performed pursuant to this contract shall be coordinated between the State's liaison and the Contractor's liaison.

	will be the liaison for the State.
(Address): (City, State, Zip): (406) E-mail:	_
L-IIIaII.	will be the liaison for the Contractor.
(Address): (City, State, ZIP): Telephone:	
Cell Phone: Fax: F-mail:	

The State's liaison and Contractor's liaison may be changed by written notice to the other party. Written notices, requests, or complaints will first be directed to the liaison.

#### 14. MEETINGS

The Contractor is required to meet with the State's personnel, or designated representatives, to resolve technical or contractual problems that may occur during the term of the contract or to discuss the progress made by Contractor and the State in the performance of their respective obligations, at no additional cost to the State. Meetings will occur as problems arise and will be coordinated by the State. The Contractor will be given a minimum of three full working days notice of meeting date, time, and location. Face-to-face meetings are desired. However, at the Contractor's option and expense, a conference call meeting may be substituted. Consistent failure to participate in problem resolution meetings, two consecutive missed or rescheduled meetings, or to make a good faith effort to resolve problems, may result in termination of the contract.

#### 15. CHOICE OF LAW AND VENUE

This contract is governed by the laws of Montana. The parties agree that any litigation concerning this bid, proposal or subsequent contract must be brought in the First Judicial District in and for the County of Lewis and Clark, State of Montana and each party shall pay its own costs and attorney fees. (See Mont. Code Ann. § 18-1-401.)

#### 16. SCOPE, AMENDMENT AND INTERPRETATION

- **16.1** Contract. This contract consists of (insert number) numbered pages, any Attachments as required, RFP #(insert RFP number), as amended and the Contractor's RFP response as amended. In the case of dispute or ambiguity about the minimum levels of performance by the Contractor the order of precedence of document interpretation is in the same order.
- <u>16.2 Entire Agreement.</u> These documents contain the entire agreement of the parties. Any enlargement, alteration or modification requires a written amendment signed by both parties.

#### 17. EXECUTION

The parties through their authorized agents have executed this contract on the dates set out below.

(INSERT AGENCY NAME) (Insert Address) (Insert City, State, Zip)	(INSERT CONTRACTOR'S NAME) (Insert Address) (Insert City, State, Zip)		
BY:(Name/Title)	BY:(Name/Title)		
BY:(Signature)	BY:(Signature)		
DATE:	DATE:		
Approved as to Legal Content:			
Legal Counsel (Date)			

# **APPENDIX C:**

# Final Environmental Assessment for the Mount Haggin WMA Habitat Restoration Project \*

<sup>\*</sup> Please note that the Final Environmental Assessment is comprised of the Decision Notice and the Draft Environmental Assessment.

#### **ENVIRONMENTAL ASSESSMENT DECISION NOTICE**

For the
Mount Haggin Habitat Restoration Project
Montana Fish, Wildlife & Parks

Region 3, Bozeman March 2009

#### **Preface**

The purpose of the acquisition of the Mount Haggin WMA by FWP in 1976 was to provide winter range for elk, mule deer, and moose, in addition to providing public outdoor recreational opportunities. Over the years, there has been a decrease in the number of acres dominated by aspen and shrub/grassland communities on the WMA due to forest succession processes and expansion of Douglas fir and lodgepole pine into open areas due to past grazing practices and fire suppression policies. In addition, large, dense stands of evenaged lodgepole pine that occur across the WMA provide a limited amount of forage and structural complexity that would better benefit wildlife and in recent years have become heavily impacted by mountain pine beetle infestations that are occurring throughout SW Montana.

Both aspen and antelope bitterbrush are important sources of food and cover for many wildlife species, including elk, mule deer, moose, black bear, mountain grouse, numerous songbird species, and small mammals. In some places on Mount Haggin WMA, aspen stands are declining in size and health due to forest succession as conifers replace aspen as the dominant over-story tree. Since many wildlife species rely on aspen communities for food and cover, loss of aspen across the WMA would have a negative impact on local populations of both game and nongame species. At the forest-shrub/grassland interface of Mount Haggin WMA, bitterbrush communities are being impacted by the expansion of Douglas fir along the forest edge. Bitterbrush is an important food source for wintering mule deer and elk. The bitterbrush plant is highly intolerant of shade and depends on an open over-story to thrive. Where Douglas fir trees overtop individual shrubs and shade out direct sunlight, the plant's vigor and ability to regenerate are greatly reduced and the plant eventually dies.

While large, dense stands of even-aged lodgepole pine on Mount Haggin WMA provide cover to wildlife, the overall lack of structural diversity makes them less attractive to wildlife and more prone to mountain pine beetle infestations, which have been occurring throughout a large area of southwest Montana over the past several years. The result is now large tracts of dead or dying lodgepole pine that with time could contribute to heavy ground fuel build-up and create large piles of impassable debris that will impede big game use and movement patterns on the winter range. While FWP recognizes that dead trees can serve an important ecological function by providing habitat to cavity-nesting birds and contributing nutrients to the soil, the negative impacts of large tracts of dead trees such as is occurring on Mount Haggin WMA have the potential to outweigh the benefits.

#### **Proposed Action**

Montana Fish, Wildlife & Parks (FWP) is proposing to approve the Mount Haggin WMA Habitat Restoration project. Specifically, the project proposes to remove conifers from up to 100 acres of selected bitterbrush stands and 150 acres of selected aspen stands. In addition, the project also proposes to remove beetle-killed lodgepole pine from approximately 700 acres of conifer forest in the Gregson Creek area of the WMA. The intended collective benefit of this proposed project is to improve overall habitat conditions across big game winter range of the WMA.

#### **Public Process and Comments**

FWP is required by the Montana Environmental Policy Act (MEPA) to assess potential impacts of a proposed action to the human and physical environment. In compliance with MEPA, an Environmental Assessment (EA) was completed for the proposed project by FWP and released for public comment on

Public comments on the proposed action were taken for 30 days (through February 27, 2009). Legal notices were printed in the *Montana Standard* (Butte) and the *Anaconda Leader*. The EA was also posted on the FWP webpage: <a href="http://fwp.mt.gov//publicnotices/">http://fwp.mt.gov//publicnotices/</a>.

Seven individuals submitted comments; two of those were on behalf of groups, one was on behalf of a local business, and the rest were representing themselves only. Of the seven respondents, all were in support of the proposed action but all seven expressed at least one concern related to the project.

The supporters of the Mount Haggin Habitat Restoration project cited the following reasons: 1) the need to improve habitat for wildlife, which will ultimately lead to improved recreational opportunity, 2) the need to improve forest health by removing beetle-killed lodgepole pine, and 3) the need to reduce forest fuels by removing beetle-killed lodgepole pine.

Below is a summary of the comments and questions received and FWP responses to them:

#### 1) Use of the term "encroachment"

Two comments were received under this category. One respondent felt that the term "encroachment" should replace the term "forest succession", as used in Section 1.2 of the Draft EA, for consistency. The other respondent felt that the term is unscientific and denotes something that "doesn't belong", and suggested that the term be replaced with "second growth conifers".

FWP response: FWP agrees that terms should be used consistently and appropriately in this and all scientific documents and that the term "encroachment" may not be the best word choice for what is being expressed in this Draft EA. Therefore, "encroachment" has been replaced with "expansion" in the Final EA.

#### 2) Include the Army Corps of Engineers in the list of Overlapping Jurisdiction

One question was received whether the Army Corps of Engineers (COE) should be included in the list of Overlapping Jurisdiction (Section 1.5)

FWP response: A COE 404 permit is required only for federally listed navigable waters. In Montana, those are portions of the Yellowstone, Missouri, and Kootenai Rivers. The creeks involved in this project, Gregson and Whitepine Creeks, do not fall into this category and thus the COE does not need to be included in the list of Overlapping Jurisdiction. For this project, a 124 permit issued by FWP is required. At the time this permit is applied for, an assessment will be made as to whether a 310 permit issued by Department of Natural Resource Conservation or a 318 permit issued by Department of Environmental Quality are also needed. All applicable permits will be obtained before this project commences.

#### 3) Proposed timber cut as a means of reducing fuel load

Two comments were received concerning the reduction of fuel loads as one of the benefits of this project. One respondent felt that using language such as "threat of catastrophic wildfire" was a fear tactic that should not be used by FWP and that the attempt to control mountain pine beetle infestations and maintain healthy forests to benefit wildlife should be enough justification for logging certain areas of the WMA. Another respondent felt that while the reduction in fuel loading as suggested in this project is laudable, it would only be beneficial in more mild fire seasons and not prove effective as a firebreak in more extreme fire years.

FWP response: It is not FWP's intent to use fear tactics to justify a management action on a WMA.

Therefore, to this end, language has been edited in the EA to avoid this connotation. In addition, FWP acknowledges that the amount of tree removal proposed in this project will not be effective against a large-scale fire. However, the intent of this project is not to create a complete firebreak along the borders

of the WMA but rather to remove some of the dead and dying lodgepole pine that would contribute not only to forest fuels but also could eventually create large, impassable piles that will impede wildlife use and movement in this area.

#### 4) Omission of antelope and other species from the list of wildlife using Mount Haggin WMA (Section 3.2.5)

Two comments were received concerning the omission of antelope from the list of wildlife using Mount Haggin WMA in Section 3.2.5. One respondent also included beaver, moose, black bear, and white-tailed deer as species omitted from the list.

FWP response: Unintentionally, antelope, along with beaver and white-tailed deer, had not been listed in the Draft EA. Since these species do, in fact, use portions of the WMA, the Final EA has been updated to include them. Moose and black bear were mentioned in the Draft EA.

#### 5) Concern for steep decline in big game populations in Hunting District 341, including the project area

Three comments were received under this category. One respondent questioned if FWP is looking at other factors besides forage availability that might be contributing to the decline in big game populations. One respondent questioned what effects this project might have on local big game populations. One respondent commented on the fact that low mule deer densities currently exist in this area.

FWP response: FWP biologists are looking into all factors that might help to shed light on the decline in big game populations that have been occurring in HD 341 over the past 10-15 years. It is the intent of FWP that this project will improve habitat conditions on the WMA and therefore have a positive effect on local big game populations. FWP will continue to conduct annual aerial surveys in order to monitor big game populations in HD 341. Other than the habitat restoration work proposed in this project for the benefit of wildlife in general and big game species in particular, other factors affecting game management in this area are beyond the scope of this project and therefore will not be addressed here.

#### 6) Use of straw bales to control erosion on steep sloes

One respondent suggested that FWP use straw waddles in place of straw bales. Reasoning for this is that waddles are less expensive, easier to install and maintain, and are usually made of rice straw which eliminates the worries for weed infestation. In addition, waddles are biodegradable and when left in place continue to give protection against slope erosion.

FWP response: FWP will follow this suggestion, for the reasons stated above. Language in the Final EA has been changed to reflect this.

#### 7) Suggested rewording for Section 4.1.5 – Wildlife (Predicted Consequences of Alternative B)

One respondent suggested that in Section 4.1.5, FWP consider rewording the sentence "The continued decline of important winter forage for ungulates (i.e. aspen and bitterbrush) within the WMA may influence elk, deer, and moose to move elsewhere, potentially onto nearby private lands, when forage at the WMA is exhausted". The respondent felt that this gives the impression that big game will eat all the forage on the WMA until there is nothing left.

FWP response: FWP agrees with the respondent's suggestion and has changed the language in the Final EA to reflect this.

#### 8) Concern for noxious weed establishment

Two comments were received under this category. One respondent expressed concern for the potential for the spread of noxious weeds where road construction to accommodate the project will occur. One respondent expressed support for the project's proposal to reseed any disturbed areas with native grasses in order to prevent the spread of weeds and further limit forage for wildlife.

FWP response: As expressed in the project proposal, FWP will adhere to all guidelines and recommendations for managing noxious weeds in accordance with the FWP Integrated Noxious Weed Management Plan. This includes: power washing of any vehicle or equipment that will be driven off-road prior to arrival on the property; reseeding areas disturbed as a result of this project with a native grass/forb mix; and mechanically, biologically, and/or chemically treating the treatment areas for weed control for up to five years after completion of this project.

#### 9) Concern for the decline in the price of timber

Two comments were received concerning the recent decline in the price of timber and whether timber receipts will cover the costs of the project, as proposed, or if FWP would have to pay to implement this project.

FWP response: The costs and income of the project as stated in the Draft EA were based on July 2008 values. As originally designed, receipts generated from the removal of merchantable timber in this project would cover the costs of other aspects of the project, such as the hand-removal of Douglas fir from bitterbrush. In recent months, there has been a significant drop in the value of timber and the value continues to drop. At this point, it is not known whether timber receipts will fully cover the project as proposed as this will depend on the value of timber at the time bids are taken. However, FWP has the flexibility to adjust the scope of this project so that at the very least, costs equal income and this project does not require additional funds from FWP operations budget to implement.

#### 10) Concern for use of German Gulch Road to haul timber

One comment was received concerning the use of German Gulch Road by logging trucks in the event that FWP does not gain permission to use the privately owned Beal Mine Haul Road adjacent to the WMA to haul logs. The respondent wanted assurance that in this event, FWP would be responsible for returning that portion of the German Gulch Road as it passes through private property adjacent to the WMA to conditions that existed prior to commencement of the project.

FWP response: FWP feels this is a reasonable request and is willing to grant those assurances in the event that logging trucks will need to use the German Gulch Road for access to and from the WMA.

#### 11) Loss of security cover to big game

Two comments were received under this category. One respondent recommended that all new roads through elk habitat be carefully evaluated. One respondent was concerned that a large clear-cut area would greatly reduce elk and deer security cover, making them more vulnerable during hunting season.

FWP response: FWP recognizes that any time a new road is created or an existing road is improved, the potential exists for increased human use of that area. In the case of this project, the placement of new roads and the reopening of old roads as proposed occur in an area of Mount Haggin WMA that has a travel restriction already in place that prohibits non-authorized motorized travel into the area. In addition, the entire portion of the WMA west of the Continental Divide is closed to all motorized traffic Dec 2nd – May 1st for wintering big game security. The intent of this project is to open existing and new logging roads only for the duration of the project and only to authorized travel. New roads will be constructed to minimum standards only. All roads will be closed to unauthorized motorized traffic after the project is completed. FWP feels that these measures will minimize impacts to elk in this area.

FWP agrees that large clear-cut areas could reduce deer and elk security cover, especially during hunting season. While the combined acreage of the adjacent Gregson North, South, and Excaliner treatment areas is relatively large (approximately 625 acres), the acreage denotes the area where the forest health prescription will be applied and not the number of acres that will be cut. Within this area, lodgepole pine stands are interspersed with Douglas fir, alder thickets, willow, and aspen stands on a landscape of broken topography. The prescription calls for removal of all lodgepole pine while Douglas fir and all deciduous trees will remain. Approximately two-thirds of the combined acreage of these three

cutting units is comprised of lodgepole pine. FWP will contract with a licensed forester to administer the timber removal portion of the project. The forester will work closely with the local wildlife biologist to make daily on-the-ground decisions as to how to tailor the harvest to best meet the objectives of this project, all of which involve benefits to wildlife.

#### 12) Concern for details of timber cuts

Six comments were received under this general category. Comments were subcategorized into the following:

A. Concern for the size and shape of cutting units and the tree species to be removed

Four respondents felt that the size of the Gregson cutting units was too large, especially if it were all to be clear-cut. Three respondents recommended that rather than one large clear-cut, they suggest smaller cutting units not to exceed 40 acres that are irregular in shape and be designed to appear as natural openings in the forest. Three respondents suggested that islands of trees be left standing within cutting units, and breaks of trees be left between cutting units to create a mosaic pattern on the landscape. One respondent does not want to see any Douglas fir removed from the Gregson cutting areas.

FWP response: As explained in the FWP response to Comment 11, the entire acreage of the Gregson cutting units will not be clear-cut, only stands of lodgepole pine will be removed. The Draft EA lists specific criteria for timber removal, such as avoiding thinning along forest opening edges, leaving sufficient cover adjacent to and between units, retaining Douglas fir and deciduous tree species, retaining forest cover adjacent to benches and finger ridges for thermal and bedding cover, and that cutting units will be placed to enhance cover types important for elk and other big game, such as aspen stands and willow communities. The Butte Area wildlife biologist will work cooperatively with a licensed forester contracted by FWP to develop final plans and specifications for the proposed project in accordance with these and other criteria listed in the Final EA. Reducing individual cutting units to smaller acreages is an option.

#### B. Concern for the timing of logging

One respondent recommended that logging not occur in areas when elk would normally be using them. FWP response: Since the area proposed to be logged is located primarily on winter range and logging is anticipated to occur during the summer months, FWP feels this concern has been adequately addressed in the Final EA.

#### C. Concern for logging along road edges and in drainage crossings

One respondent recommended that trees should not be removed along roads and that no logging should occur in migration corridors between drainages where elk regularly travel.

FWP response: Since this project is to occur in an area closed to all unauthorized motorized travel, FWP feels the need to maintain security cover along roads is not as necessary here as it would be in areas of motorized access. Additionally, since this project is contained within a single drainage and there are no other proposed cutting units in adjacent drainages, elk migration routes between drainages do not apply here. Most of the logging prescriptions involving roads are directed at standing, dead trees which will end up on the ground sooner than later.

#### 13) Slash removal

Three comments were received concerning removal of slash generated from cutting lodgepole pine. One respondent does not want slash left on the hillside in areas where the excaliner method of timber extraction is being proposed but rather wants to see it piled and burned. One respondent incorrectly understood the project proposal to read that all slash from lodgepole pine harvest will be scattered across the cutting area and suggested that it be piled and burned instead. One respondent recommended that all slash be piled and burned, and that no slash should remain higher than 1.5 feet.

FWP response: As stated in the Draft EA, FWP intends to remove slash generated from the harvest of lodgepole pine in the Conifer Forest Health treatment areas by broadcast burning rather than pile and burn. Broadcast burning better promotes vegetative growth of grasses and forbs than does the pile and burn method. This is in accordance with findings from the Montana Cooperative Elk Logging Study (Lyon et al. 1985). In the aspen treatment areas, slash will be piled and burned since this form of slash removal is more beneficial to promote aspen suckering. In the bitterbrush treatment areas, slash will be lopped and scattered to provide some mechanical protection for bitterbrush seedlings. Given these slash treatments, slash piles across the project area are not expected to exceed 1.5 feet in height.

In steep slope areas, trees will be cut with a feller-buncher then hauled to landings by an excaliner. Approximately 75% of the slash will occur at the landing where trees will be processed. The remaining slash resulting for cutting and hauling trees from the hillside will remain in place for nutrient cycling.

#### 14) Fisheries in Gregson Creek

Two comments were received under this category. Both respondents disagreed with the statement made on page 11 of the Draft EA, Section 3.2.3 – Water & Fisheries, that Gregson Creek is considered fishless. One respondent recommended that the harvest plan employ best management practices to prevent sediment flows to Gregson Creek, including at least 100-foot buffers on both sides of the creek. One respondent believes that the FWP fisheries biologist should check all waterways on Mount Haggin WMA for fish status information.

FWP response: Although FWP fisheries biologists consider the upper reaches of Gregson Creek to be fishless due to the elevation and steep gradient of the creek, the project will treat both Gregson and Whitepine Creeks as if they contain fish populations. In the Draft EA, it is stated that new roads will be constructed in strict accordance with Water Quality Best Management Practices for Montana Forests (Logan 2001) and existing logging roads that are to be used for this project and that have been built prior to the 1991 Streamside Management Act will be brought into compliance. While it was not explicitly stated in the Draft EA that best management practices be applied when logging to prevent sediment flows into waterways, it is FWP's full intent to employ such practices in this and all projects. Language in the Final EA has been edited to clarify this intent.

While it is the intent of the local FWP fisheries biologist to survey all drainages on Mount Haggin WMA for fisheries status, such an action is beyond the scope of this EA.

#### 15) Use of funds generated by this project

One comment was received regarding how funds generated from timber receipts from this project should be used. The respondent suggested that funds received from this project, along with other unspecified funds, be applied to remediation of clear-cut tracts from the 1970's and 1980's on what is now the Mount Haggin WMA. Specifically, use of funds would go toward thinning to create more diverse, healthier forest and counteract the residual effects of those past logging practices.

FWP response: At this point it is unknown what extra funds, if any, will be generated from timber receipts from this project. Any funds generated will first be applied to covering the costs of this project. Any funds remaining must then be placed in FWP's Real Property Trust, as mandated by statute.

#### 16) Inadequate description of all vegetative communities important for wildlife on Mount Haggin WMA

One comment was received under this category. The respondent pointed out that no reference to big sagebrush was made in the Draft EA.

FWP response: As mentioned in the Draft EA, because of the focus of this project, only those vegetative community types affected by the proposed project were discussed in detail (i.e. conifer forest, bitterbrush, and aspen types). The big sagebrush community type was not one of those affected by this project.

#### 17) Failure to mention rest-rotation grazing on Mount Haggin WMA

One comment was received under this category. The respondent points out that FWP has employed a rest-rotation grazing plan on the WMA since 1984 and that this has been very successful for improving vegetative conditions for both wildlife and fisheries. The respondent contends that since this plan is a long-established part of the management of Mount Haggin WMA, that it should be mentioned in the Draft EA.

FWP response: While FWP agrees with the respondent that the rest-rotation grazing plan on Mount Haggin WMA has been and continues to be an integral and effective component to management of the WMA, the area covered in this project proposal does not include any grazing system and therefore no mention of the Mount Haggin grazing plan has been made in the Final EA.

#### 18) Allow free firewood cutting on the WMA, including commercial cutting

One comment was received under this category. The respondent suggested that FWP allow free firewood cutting of dead trees, including commercial cutting.

FWP response: FWP's policy regarding the gathering of firewood on a WMA is limited to on-site personal use of dead and downed timber only, such as for cooking fires while camped on the WMA. However, firewood cutting for off-site personal use may be allowed at the invitation of FWP, if it is deemed beneficial to the management of the WMA for wildlife. This also applies to commercial timber harvesting, according to FWP regulation (12.14.110(1) ARM).

Because of the large amount of timber to be removed and the intent to have timber receipts cover the additional costs of this project, FWP chooses to use commercial logging for this project.

#### 19) Consider burning as an alternative to logging

One comment was received under this category. The respondent suggested that burning clumps of dead trees can be effective when there is snow on the ground and elk are not in the area, and that burning eliminates the need to build new roads.

FWP response: Because of the acreage proposed for timber removal in this project, FWP does not feel burning is a safe or practical alternative to logging. Burning will not generate funds to cover costs of the project. Additionally, burning and the activities associated with burning on winter range during winter and spring conditions will displace wintering wildlife.

#### 20) More consideration given to moose and moose habitat

One comment was received under this category. The respondent recommends that moose and moose habitat needs more consideration in this proposal.

FWP response: A brief discussion on moose was offered in the Draft EA. It is unclear what further information the respondent would like to see mentioned. The proposed actions in the Draft EA, particularly those involving aspen and conifer forests, are expected to benefit moose in this portion of the WMA. In addition to the habitat improvement being proposed for this area, FWP has initiated a moose-habitat interaction study on the east side of the Continental Divide on Mount Haggin WMA that is in its third year of a 5-year study plan.

#### 21) Monitoring for effectiveness of the proposed project

One comment was received under this category. The respondent recommended that pre-evaluation vegetative study plots, including photo plots, should be established before treatment occurs and re-read and photographed after treatment.

FWP response: During July 2008, FWP biologists established permanent vegetation study plots, including fixed photo points, in 4 of the 5 bitterbrush treatment areas. Vegetation will be measured every 5 years and photos will be taken annually. Fixed photo points will be established for each of the aspen treatment areas and the forest health cutting units as well. Initial photos will be taken prior to treatment, then annually thereafter. In addition, to monitor the effects of the lodgepole pine removal from the conifer forest in order to improve forest health, FWP will monitor winter use of the logged areas by elk, mule deer, and moose during annual winter aerial surveys of the winter range. Furthermore, use of the logged areas by big game, small mammals, and birds will be monitored from the ground, using the logging roads as transects. The transect will be monitored at least once during the winter and once during the summer for at least 5 years post treatment. Scat piles and tracks intersecting the transect will be identified and counted. Birds detected along the transect will also be identified and counted.

#### Literature Cited

Logan, R. 2001. Water Quality BMPs – Best Management Practices for Montana Forests. EB158, MSU Extension Forestry, Missoula, MT.

Lyon, L.J., T.N. Lonner, J.P. Weigand, C.L. Marcum, W.D. Edge, J.D. Jones, D.W McCleerey, and L.L. Hicks. 1985. Coordinating elk and timber management. Final report of the Montana cooperative elklogging study 1970-1985. Montana Fish, Wildlife, & Parks, Bozeman.

#### **Final Environmental Assessment**

Slight modifications to the Draft Environmental Assessment have been made based on public comment. The Draft Environmental Assessment as modified, together with this Decision Notice, will serve as the final environmental review for this proposal.

#### **Decision**

Based on the Environmental Assessment and public comment, it is my decision to approve the proposed action for implementation of the Mount Haggin WMA Habitat Restoration project.

I find there to be no significant impacts on the human and physical environments associated with this project. Therefore, I conclude that the Environmental Assessment is the appropriate level of analysis, and that an Environmental Impact Statement is not required.

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Patrick J. Flowers Date Region 3 Supervisor Montana Fish, Wildlife & Parks

#### **Draft Environmental Assessment**

## Mount Haggin Wildlife Management Area Habitat Restoration Project

## January 2009

#### 1.0: PURPOSE OF AND NEED FOR ACTION

#### 1.1 Proposed Action

Montana Department of Fish, Wildlife, and Parks (FWP) propose to improve a portion of the wildlife habitat within the Mt. Haggin Wildlife Management Area. Habitat to be affected is approximately 900 acres of aspen and bitterbrush communities, as well as a portion of conifer forests, on the northeastern quadrant of the wildlife management area (WMA).

#### 1.2 Need for the Action

The acquisition of the Mt. Haggin WMA by FWP in 1976 was to provide winter range for elk, mule deer, and moose, in addition to providing public outdoor recreational opportunities. Over the years, Mount Haggin WMA has seen a decrease in the number of acres dominated by aspen and mixed shrub/grassland communities due to the expansion of Douglas fir and lodgepole pine into those areas. In addition, due to past large-scale logging activities, conifer forests have become dense stands of even-aged trees that make them highly susceptible to disease and insect infestations and limit the amount of available forage and structural complexity needed for healthy forest communities that benefit wildlife.

Both aspen (*Populus tremuloides*) and bitterbrush (Antelope bitterbrush, *Purshia tridentata*) are important food sources for ungulates and provide cover for game and nongame species. Across Mount Haggin WMA, aspen stands are at the risk of being lost due to forest succession as conifers replace aspen as the dominant over-story species. Long-time aspen researcher Dale Bartos found there to be a 64% reduction in the number of acres where aspen can be found today compared to the species' historic range throughout Montana (Bartos 2001, Bartos and Campbell, Jr. 1998, Campbell and Mitchell, *final prep.*). The lack of natural disturbance, such as fire, is considered the primary reason for the species' waning population.

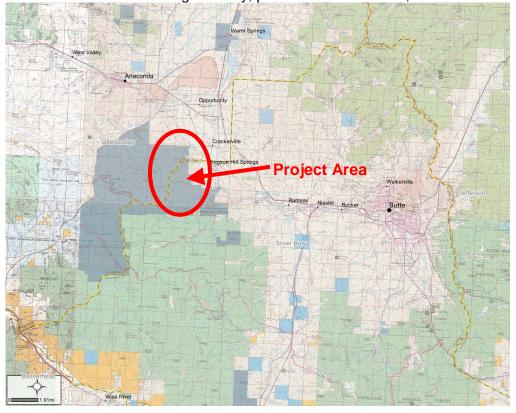
Conifer expansion is also negatively impacting bitterbrush and its associated plant communities on the WMA. The bitterbrush plant itself is highly intolerant of shade. Where Douglas fir trees overtop individual shrubs and shade out direct sunlight, the plant's vigor and ability to regenerate are greatly reduced and the plant eventually dies. Unlike aspen, fire does not enhance the ability of bitterbrush to regenerate. Instead, bitterbrush relies on seed distribution and caching of its seeds by rodents to regenerate and an open overstory to thrive. The dominant grass in bitterbrush communities is rough fescue (*Festuca scabrella*), a densely tufted bunchgrass that is considered the highest-producing, native bunchgrass in the Mountain grasslands. Because it retains a considerable amount of nutritive value after maturity, it is a key forage species on elk winter range. It also is being negatively affected by Douglas fir expansion.

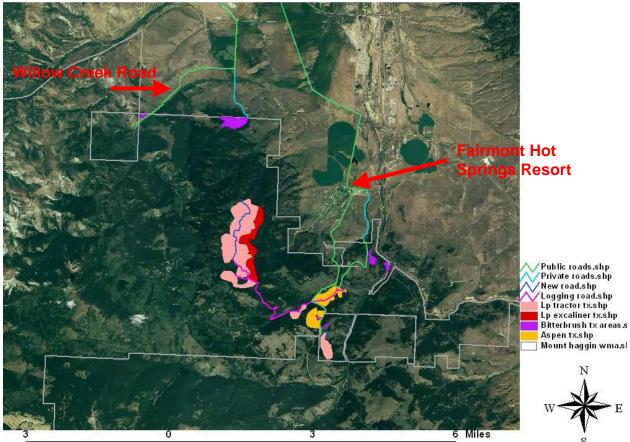
In addition to the conifer expansion pressures on aspen and bitterbrush communities, the winter range portion of Mount Haggin WMA contains large stands of dense, even-aged lodgepole pine, relics of past logging operations. Even-aged stands have less structural diversity, making them less attractive to wildlife and more prone to disease and insect infestations. In fact, an unprecedented outbreak of Mountain pine beetle has attacked and killed large tracts of lodgepole pine (*Pinus contorta*) in southwest Montana, including within Mount Haggin WMA. A decade-long drought and lack of extreme winter temperatures capable of killing beetle larvae have contributed to the current local beetle epidemic on the WMA, in addition

to the existing forest structure. The result is large stands of dead and dying lodgepole pine that will contribute to heavy ground fuel build-up and could potentially create large piles of impassable debris that would impact big game use and movement patterns on the winter range. While FWP recognizes that dead timber can serve an important ecological function by providing habitat to cavity-nesting birds and contributing nutrients to the soil, the negative impacts of large tracts of dead timber have the potential to outweigh the benefits.

#### Location of Project Area

Mount Haggin Wildlife Management Area is located approximately 15 miles west of Butte, MT at the base of the Anaconda-Pintler Mountains in Deer Lodge and Silver Bow Counties. The proposed project will take place within the Silver Bow portion of the WMA at Sections 4, 9,10, 13, 14, 15, 16, 22 and 23 of T03N, R10W and within Deer Lodge County, portions of Sections 31, 32 and 33 of T04N, R10W.





Close-up of project area, showing location of specific vegetation treatment areas.

\*\*\*NOTE: Vegetation site-specific aerial maps are included in Appendix A.

#### 1.3 Objectives of the Proposed Action

- 1.3.1 Objective 1: Reduce the expansion of Douglas fir within bitterbrush communities, in order to promote the health and regeneration of bitterbrush and associated plants important to wildlife, such as rough fescue.
- 1.3.2 <u>Objective 2</u>: Reduce the expansion of Douglas fir and lodgepole pine within and surrounding aspen communities, in order to promote stand health and propagation of aspen.
- 1.3.3 Objective 3: Remove stands of beetle-killed lodgepole pine in order to enhance the overall complexity of stand structure across the winter range, mitigate pine beetle infestation and generally improve forest health, and reduce forest fuel loads.

#### 1.4 Relevant Plans and Authority

1.4.1 Mount Haggin Wildlife Management Area Interim Management Plan (1980)

The interim management plan states Mount Haggin WMA will be managed for dispersed outdoor recreation activities that are consistent with the area's ability to support such use without degradation of its natural resource values (wildlife, fisheries, vegetation, and cultural/historical resources). Special attention would be given to improving deteriorating areas and returning all lands to a more natural environment.

1.4.2 Montana Statewide Elk Management Plan (2004)

One of the habitat goals specified in FWP's 2004 Elk Management Plan is to improve elk habitat through projects designed to improve vegetative diversity and maintain or increase carrying capacity on winter

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range. The proposed project would work towards meeting this goal through the reduction of conifer establishment within bitterbrush and aspen habitats, and by increasing structural diversity and promoting forest health by removing stands of beetle-killed lodgepole pine within conifer forests on Mount Haggin WMA.

1.4.3 Montana Department of Fish, Wildlife and Parks Comprehensive Fish and Wildlife Conservation Strategy (2005)

FWP's Comprehensive Fish & Wildlife Management Strategy (CFWCS, FWP 2005) identified seven different community types of greatest conservation need, including mixed shrub/grassland associations. The proposed habitat restoration project will target areas included in the shrub/grassland community type that are threatened by conifer expansion. Over 30 wildlife species either depend entirely on this type of habitat for their survival or they rely on the resources found there to supplement their use of other environments.

In addition to the importance of the shrub/grassland community type affected by the proposed project, numerous wildlife species of concern are found on Mount Haggin WMA. The following is a list of sensitive species that are known or assumed to exist within the WMA. For each species, it is denoted which tier the species is ranked (1-5, with 1 being most in need of conservation) and whether it is a Species of Concern in Montana (SOC) or a federally listed Threatened or Endangered Species (T/E).

Common Name	Scientific Name	Tier Rank/SOC
Northern Goshawk	Accipiter gentiles	2, SOC
Black-backed	Picoides articus	1, SOC
Woodpecker		
Olive-sided Flycatcher	Contopus cooperi	1, SOC
Great Gray Owl	Strix nebulosa	2, SOC
Flammulated Owl	Otus flammeolus	1, SOC
Clark's Nutcracker	Nucifraga	3, SOC
	Columbiana	
Fringed Myotis	Myotis thysanodes	2, SOC
Hoary Bat	Lasiurus cinereus	2, SOC
Gray Wolf	Canis lupus	1, T/E
Wolverine	Gulo gulo	2, SOC
Canada Lynx	Lynx Canadensis	1, T/E
Fisher	Martes pennanti	2, SOC
Westslope Cutthroat	Oncorhynchus clarkii	1, SOC
Trout	lewisi	
Bull Trout	Salvelinus	1, T/E
	confluentus	
Agapetus Caddisfly	Agapetus Montanus	3, SOC

#### 1.5 Overlapping Jurisdiction

- 1.5.1 Name of Agency and Responsibility
  - a. Montana Department of Environmental Quality Air Quality Permits
  - b. Montana Department of Fish, Wildlife & Parks Montana Stream Protection Act (124 permit)
  - c. Montana Department of Natural Resources & Conservation Wildfire Suppression
  - d. Montana State Historic Preservation Office Cultural and Historic Resources
  - e. Deerlodge and Silver Bow Counties Weed Management

All necessary permits will be obtained prior to the implementation of the project.

#### 1.6 Decision That Must Be Made

The decision to be made is whether Montana Fish, Wildlife & Parks should approve the habitat restoration project for a portion of Mount Haggin Wildlife Management Area, which would entail the removal of conifers from selected areas. This EA discloses the analysis and environmental consequences associated with implementing the proposed action or its alternative. This EA will provide information and analysis to determine whether an action results in a significant effect and would, therefore, require the completion of an environmental impact statement (EIS). The responsible official for this proposal is the Region 3 Supervisor, Pat Flowers. If an EIS is not required, a Decision Notice will document the decision and the rationale for it.

#### 2.0: ALTERNATIVES

**2.1 Alternative A (Proposed Action):** To Improve Wildlife Habitat On the Winter Range of Mount Haggin Wildlife Management Area by Removing Conifers Affecting Aspen and Bitterbrush Communities and by Removing Select Stands of Beetle-killed Lodgepole Pine Within Conifer Forests in Order to Increase Structural Diversity and Promote Forest Health.

#### **Anticipated Habitat Treatment Prescriptions:**

\*\*\*NOTE - FWP contracted with a licensed forester during 2008 to determine the feasibility of doing this project. Much of the prescriptions detailed here are a product of that contract. \*\*\*

Please refer to Aerial Maps in Appendix A for specific locations of treatment areas.

Aspen: There are two aspen stands identified for treatment, Clayton and Hi Rye; both are adjacent to the Beal Mine Haul Road. Approximately 150 total acres will be treated (Clayton - 81 acres, Hi Rye - 65 acres).

All conifers (Douglas fir and lodgepole pine), pole-size and larger, will be mechanically removed from within selected aspen stands and from a buffer of approximately 30 meters surrounding those stands. This will open up the forest canopy to provide more direct sunlight to aspen and also remove the seed source for further conifer establishment in proximity to those stands. In addition, the mechanical disturbance to aspen roots resulting from logging activities is likely to be sufficient to increase bud growth and promote aspen suckering.

Slash resulting from the removal of conifers will be piled and burned when preferred weather and moisture conditions occur.

Bitterbrush: There are five bitterbrush treatment areas, totaling approximately 100 acres (Willow Creek – 4 acres, Willow Glen – 64 acres, German Gulch – 15 acres, Durant – 8 acres, and Hi Rye – 3 acres).

All Douglas fir with 6-inch Diameter at Breast Height (DBH) or smaller will be removed, including seedlings, which will be hand-pulled. This will remove most of the existing and potential canopy of Douglas fir that shades out and eventually eliminates bitterbrush. Once the over-story of Douglas fir is removed, access to direct sunlight by bitterbrush plants should be sufficient to maintain vigor and regeneration of this plant community.

Slash resulting from the removal of Douglas fir will be lopped and scattered.

Conifer Forest Health: There are four conifer forest health treatment areas, totaling approximately 655 acres (Gregson North – 417 acres, Gregson South – 67 acres, Excaliner – 148 acres, and White Pine – 23 acres). Although the combined acreage of the Gregson North, South, and Excaliner treatment areas is relatively large (approximately 625 acres) and in close proximity to one another, the expected impact on overall elk

security and cover across the entire winter range is likely to be minimized by the fact that these acres are located in the heart of an essentially roadless area (except for old logging roads which are closed off to motorized traffic) and are heavily interspersed with Douglas fir and occasional stands of aspen, alder and willow, all of which will remain.

All lodgepole pine, pole-size or larger will be mechanically removed from select treatment areas while Douglas fir within the areas will be retained as much as possible. Small pockets (less than two acres) of beetle-killed lodgepole pine in proximity to the access roads may be opportunistically harvested as well. Removal of lodgepole pine, most of it dead or dying from beetle infestation, will promote forest health by reducing the source of the infestation and by creating gaps in stands that will slow the spread of remaining beetles. Additionally, by removing lodgepole pine while retaining other tree species will enhance the overall complexity of forest stand structure across the winter range by creating a mosaic of stand ages and composition, and will increase forage production for wintering big game by removing some of the shading forest canopy.

Slash generated will be broadcast burned when preferred weather and moisture conditions occur. This is in accordance with findings from the Montana Cooperative Elk Logging Study (Lyon et al. 1985).

## **Timber Removal Logistics**

## Licensed Forester:

A licensed forester will be retained on contract by FWP to supervise the proposed habitat restoration work, in conjunction with the Butte Area wildlife biologist. The forester will be selected through the State's competitive bid process. The Butte Area wildlife biologist will consult with this forester to develop final plans and specifications for the proposed project in accordance with the criteria listed below.

## Minimize Impacts to Elk:

Findings from the Montana Cooperative Elk-Logging Study (Lyon et al. 1985) will guide the logging portion of this project. Specifically, the following will apply:

- To minimize the loss of habitat security:
  - Logging roads will be restricted to logging traffic only and will be closed to motorized traffic once the project is completed.
  - Logging activity will be concentrated both temporally and spatially.
  - o Thinning will be avoided along forest opening edges.
  - Sufficient cover will be left adjacent to and between units.
- To maintain the integrity of cover for elk:
  - Douglas fir and other deciduous tree species will be retained in the forest health treatment areas. Only lodgepole pine, pole-size or larger will be removed.
  - Forest cover adjacent to benches and finger ridges will be left for thermal cover and bedding sites.
  - Cutting units will be placed to enhance cover types important for elk and other big game, such as aspen stands and willow communities.

Findings from the Long Tom elk-logging study (Lyon et al. 1985) have shown that:

- o Displacement of elk is minimal if roads are open for logging traffic only.
- o Displacement is least in July and greatest in the fall.
- Elk moved back into the area when logging was completed and the roads were closed.
- Elk avoid new clear cuts unless they are fringed with dense timber. Also, elk use of clear cuts increases as the vegetation height increases. This is because the new growth consists of trees and shrubs and other available forage and browse species.

Additional Silvicultural Prescriptions and Harvest Design:

- Logging treatments will be implemented through a commercial timber sale specifying mechanical harvesters.
- The mechanical methods to be utilized are tractor and Excaliner logging. Excaliner logging uses
  motorized cables to lift the felled tree to the preparation area, while leaving very little scar marks on a
  hillside.
- In tractor harvest areas, cut trees will be skidded (rubber-tired skidders) whole length to landings where they will be processed into merchantable logs.
- In Excaliner areas, trees may be bucked to log length in the woods and logs skidded to landings. Excaliner logs will be forwarded to the main access road.
- Stumps will be cut to 4-inch height or less.
- Logging contractors will be encouraged to utilize all possible forest products derived from the salvage: sawlogs, houselogs, post/poles and pulp, market conditions permitting.
- Best management practices will be employed to prevent sediment flows to Gregson and Whitepine Creeks, including a minimum100-foot buffer on both sides of the creek where logging will not occur.

## Roads:

To address concerns for negative impacts on soil and water resources while implementing timber removal, the following criteria will be adhered to:

- As much as possible, new roads will be constructed on moderate to low slopes, giving a low impact road prism and will be constructed to the lowest standards.
- New roads will be constructed in strict accordance with Water Quality Best Management Practices for Montana Forests (Logan 2001).
- Existing logging roads that are to be used for this project and that have been built prior to the 1991
   Streamside Management Act will be brought into compliance.
- After the project is completed, new logging roads will be recontoured and seeded with native seed
  mixtures appropriate for the area. Existing logging roads that have been used for this project will also
  be reseeded. All crossing features (culverts, etc) that were placed for this project will be removed.

Specific corrective actions needed to establish operational logging roads will be the responsibility of the logging contractor under the supervision of a licensed forester working with FWP.

## Access to Treatment Areas:

- Aspen: Access to the aspen treatment areas will be from the Beal Mine Haul Road and old logging roads that exist within close proximity to those stands. The old logging roads will be bladed open to accommodate logging trucks and equipment.
- O Bitterbrush: Access to the bitterbrush treatment areas will be from the Willow Creek Road and Beal Mine Haul Road, depending on the site location. In addition, FWP has gained permission to cross a portion of the privately owned Willow Glen Ranch in order to access the Willow Glen treatment areas. ATVs will be utilized to traverse areas not adjacent to the established roads.
- Conifer Forest Health: Access to the conifer forest health treatment areas will be from the Beal Mine Haul Road, approximately 3.5 miles of old logging roads, and approximately 1.5 miles of new road that will need to be constructed for this project. Old logging roads will be bladed open to accommodate logging trucks and equipment. New roads will be built to minimum standards and will be recontoured and seeded after completion of the project.

For ease and efficiency in hauling logs from Mount Haggin WMA, FWP has gained permission from the owner of the Beal Mine Haul Road where it crosses private land to use this road during the project period. The use of this road will eliminate potential disturbances to private residences along German Gulch Road

and will provide a safer transportation route of logging equipment in and out of the WMA, since the mine road is wider and well maintained to accommodate the heavy mine equipment.

## **Timing of Project:**

All proposed treatment areas are located on the winter range of Mount Haggin WMA. Because this portion of the WMA is closed in winter to provide security for big game, the proposed project will occur during the late spring and summer seasons when road and weather conditions allow access to the treatment areas.

## Weed Management:

All guidelines and recommendations for managing noxious weeds in FWP's Integrated Noxious Weed Management Plan will be followed. These include:

- Power washing of any vehicle or equipment that will be driven off-road prior to arrival on the property.
- Reseeding areas disturbed as a result of this project with a native grass/forb mix.
- Mechanically, biologically, and/or chemically treating the treatment areas for weed control for up to five years after completion of this project.

## Costs:

Expenses for this project (i.e. removal of conifers, installation of temporary culverts, weed management, etc.) will be fully covered by the revenue generated from the sale of harvested timber. The FWP contract with a licensed forester will be paid from the FWP Habitat Bureau operations budget. Any remaining funds after the completion of the project will be deposited into FWP's Real Property Trust account to support other FWP programs.

Initial estimates for costs and revenues for this project are \$100,000 and \$300,000, respectively.

**2.2 Alternative B (No Action):** Implement No Habitat Restoration Activities and Status Quo is Maintained at the WMA

Under this alternative, FWP would not embark upon any habitat restoration activities that could improve some of the aspen and bitterbrush communities with the WMA or that would benefit the overall health of the forest communities on the winter range. Aspen and bitterbrush, both highly shade-intolerant, will continue to be encroached upon by Douglas fir and lodgepole pine. Conifer expansion into aspen and bitterbrush communities will negatively impact the vigor and ability for regeneration of these community types due to competition for water and sunlight. This in turn will negatively impact the big game populations that winter in this area and depend on aspen and bitterbrush and the associated native plant communities for food and cover.

The dense, even-aged stands of lodgepole pine will continue to be affected by the Mountain pine beetle infestation. Within a few years, all lodgepole pine pole-size and larger will be dead, creating a significant build-up of fuels that could contribute to large-scale wildfire. Furthermore, as millions of dead lodgepole pine trees begin to fall and create large piles of impassable debris, big game use and movement patterns on the winter range may be greatly impacted. Additionally, forests on the winter range will continue to lack the structural diversity that enhances conifer communities for big game, small mammals, and a variety of bird species alike.

FWP will continue to manage the WMA for the benefit of wildlife species and for year-round recreation activities, such as hiking, hunting, cross-country skiing, and fishing. FWP will carry on with noxious weed management activities within the WMA.

2.3 Alternative Eliminated from Further Consideration: To Improve Wildlife Habitat by Removing Conifers Affecting Aspen and Bitterbrush Communities in Limited Areas Within Mount Haggin Wildlife Management Area

FWP has considered doing parts of the project, i.e. just bitterbrush or just aspen or just forest health improvements, etc. However, if just the bitterbrush portion was implemented, there will be no revenue generated through the extraction and sale of timber to pay for the work and FWP would have to compete with other Wildlife Division projects to obtain the necessary funding to complete the proposed project. If FWP just implemented the aspen and/or forest health portion, those projects would likely pay for themselves (and then some). But the idea is to emphasize the collective benefit to wildlife by doing habitat restoration across a *landscape*, which in this case is the winter range, rather than at the scale of a single patch or stand. Therefore, this option was eliminated.

#### 3.0: AFFECTED ENVIRONMENT

## 3.1 Description of Relevant Pre-Existing Factors

The proposed project area has been impacted by past logging- and mining practices of the historic Anaconda Copper Mine in nearby Anaconda, MT. Much of the Mount Haggin Wildlife Management Area had been heavily logged during the mine's operation from the 1880s to the 1940s in order to provide lumber for shaft supports, building materials, and fuel for the smelters. The most recent logging on Mount Haggin WMA occurred in the 1980s in accordance with a timber contract that came with the purchase of the WMA by FWP.

Vegetation as far as eight miles away from the smelter in Anaconda has been negatively impacted by smelter emissions. The air pollution contained high levels of arsenic, sulfur, and zinc that contaminated the soil and greatly reduced the rejuvenation capacity of all types of vegetation (grasses, shrubs, and trees). The presence of bare slopes devoid of topsoil and vegetation can easily be seen on parts of Mount Haggin WMA today.

## 3.2 Description of Relevant Affected Resources

#### 3.2.1 Soil & Geologic

The area is located east of the Anaconda-Pintler range along the western edge of the Boulder batholith. Topographically, this area is a series of mountain slopes and narrow drainages. Parent materials in the area are mostly volcanic rocks, granodiorite and quartzite (lagmin 1972). Elevation ranges from 1580 to 1940 m. The soils in the area are from granitic residium and colluvium. Soils are mostly Mollisols with some Alfisols at the higher elevations and some Inceptisols on the steeper slopes. A portion of the soils in the area has been classified as loamy skeletal, mixed typic Argiborolls.

The aspen treatment areas (Clayton and Hi Rye) are in locations where the slope is of slight to moderate grade (0-30%) and are dominated by soils that are classified as gravelly ashy loam (USDA, Soil Survey).

The bitterbrush treatment areas are located in differing types of soil within the WMA with slope grades ranging from 0-40%. At Willow Creek the predominant soil is cobbly, sandy clay loam; at Willow Glen the soil is mainly sandy loam; and at the Durant, German Gulch, and Hi Rye locations the soils are primarily gravelly ashy loam (USDA, Soil Survey).

The conifer forest health treatment areas encompass soils classified as coarse sandy loam, sandy clay loam, and gravelly ashy loam (USDA, Soil Survey). These areas cover a more rocky terrain than the other

habitat restoration sites. Slope grades range from 8-50%, with the steeper grades slated for Excaliner removal of trees.

## 3.2.2 Air & Noise

All of the bitterbrush and aspen treatment areas are adjacent to or in close proximity to established roads, either the Willow Creek Road or Beal Mine Haul Road. These areas are routinely subjected to noise and dust generated by passing vehicles.

The conifer forest health treatment areas are accessible by old logging roads, which have been blocked off at the junction with the Beal Mine Haul Road since their last use in the 1980s. Hikers and hunters periodically use these roads to access the backcountry. Since this area is only accessible by non-motorized vehicles, ambient air quality is good and limited man-made sounds can be heard over the normal sounds of the forest.

## 3.2.3 Water & Fisheries

Numerous creeks traverse the northeastern portion of Mount Haggin WMA. Two creeks occur within the proposed restoration area, Gregson and Whitepine Creeks. Gregson Creek transects the Gregson North and Excaliner forest health treatment areas while Whitepine Creek is adjacent to the Clayton aspen treatment area. The Whitepine forest health treatment area is located upslope from Whitepine Creek several hundred yards.

FWP fisheries biologists have not sampled either creek, but both creeks are considered fishless due to their size and inconsistent water flows. However, both creeks likely support aquatic invertebrates such as mayflies and caddis flies, and their riparian areas likely provide habitat for amphibians such as frogs and toads.

## 3.2.4 Vegetation

The region of the WMA that would be affected by the proposed project encompasses portions of conifer forests, dry grass/shrubland communities, and aspen stands. Because of the focus of this project, only select vegetation will be discussed here.

## Bitterbrush

Bitterbrush, also known as antelope bitterbrush, is a deciduous shrub in the rose family (*Rosaceae*) with small, tri-lobed leaves. Although it can reproduce by sprouting vegetatively (Hormay 1943), it mainly reproduces by seed dispersal and from dormant rodent caches.

In addition to its intrinsic value as a shrubland community plant, bitterbrush is important for many wildlife species, especially mule deer and elk. Moose, bighorn sheep, blue grouse, and jackrabbits also use bitterbrush for food and cover (Matlock-Cooley 1993). Its seeds are an important item in the diet of many rodents and birds (Hormay 1943).

Several studies have been conducted on bitterbrush communities on the Mount Haggin WMA (Frisina et al. 2006, Guenther 1989, Guenther et al.1993, Matlock-Cooley 1993, Wambolt et al. 1996) and have added greatly to our knowledge of this plant. Guenther et al. (1993) investigated the relationships of habitat characteristics to the success of bitterbrush stands and found that bitterbrush canopy cover was greatest on south- and east-facing slopes and that bitterbrush cover decreased when cover from other plants increased. In addition, the researchers found that dead bitterbrush cover was positively correlated with deer pellet density, indicating that heavy browsing by deer might be affecting the bitterbrush. In fact, utilization of bitterbrush twigs across the study area averaged 80%, which is considered very heavy browsing when related to Hormay's (1943) conclusion that not more than 60% of current year's twig growth should be browsed in any year if the plant is to retain its vigor and produce seed.

## Aspen

Aspen is a preferred browse species for elk and moose as well as providing thermal and hiding cover to these big game species. Aspen stands also provide ideal nesting and foraging habitat to many bird species, including ruffed grouse, dusky flycatchers, black-capped chickadees, Swainson thrushes, northern flickers and downy woodpeckers.

Aspen occurs in primarily three different types (Bartos and Campbell 1998a): (1) stable, (2) successional to conifers, and (3) decadent. Stable aspen is considered to be "properly functioning" and replacing itself so that stems of various ages are visible when viewing an aspen clone. The succession of an aspen community to conifer forest often occurs when the natural forces, such as fire or disease, have affected the aspen's ability to regenerate, giving shade tolerant trees an advantage (Bartos 2001). The final type of aspen community is one in which decadent clones are generally of a single age and are very open; mature trees are not being replaced as they die because successful regeneration is lacking. Across much of Mount Haggin WMA, the influences of past logging and mining practices and the lack of natural disturbances such as wildfire have allowed conifers to become established within aspen groves. In fact, the two aspen treatment areas in this proposed project fall within the second aspen type as described above.

Occurrences of aspen regeneration from seed have been noted (Kay 1993), but aspen primarily reproduces vegetatively in the intermountain west (Schier et al. 1985). Vegetative reproduction of aspen can be initiated through manipulations that provide hormonal stimulation, proper growth environment, and sucker protection (Shepperd 2001). In a study that compared various treatments on aspen regeneration success in the Deerlodge National Forest, Hodge (1997) found that mechanical scarification and fencing proved to be successful treatments while leaving high slash concentrations on treated sites did not reduce browse intensity on aspen suckers.

## Lodgepole Pine

Much of the conifer forest on Mount Haggin WMA has been heavily affected by the logging practices of the late 19<sup>th</sup> and 20<sup>th</sup> centuries when timber was harvested to supply lumber to the Anaconda Copper Mining Company. Large amounts of timber were necessary not only to convert to charcoal for fueling local smelters, but also to produce mine "stulls" that could be used to support tunnels and shafts (Newell 1980). The ridges surrounding Mount Haggin, with their vast acreages of lodgepole pine, offered a convenient source of timber. In 1883, the Anaconda Company awarded a contract for 300,000 cords of wood. In 1906, a second contract was awarded for 100 million board feet of timber, all from the Mount Haggin area. In November 1906, the Big Hole Forest Reserve was established, in part to bring some measure of protection to the timber resources of the Mount Haggin area. Two years later, lands from this reserve were divided into the Beaverhead, Bitterroot and Deerlodge National Forests. Most of the timberlands in the Mount Haggin area were included in the Deerlodge National Forest.

Because of the immense amount of timber being harvested in the Mount Haggin area, the U.S. Forest Service developed many of their marking rules and timber selection guidelines in this area. In fact, the 1906 timber contract was the first large timber sale in U.S. Forest Service's Region 1 and because of such status, earned a visit from Gifford Pinchot, chief of the U.S. Forest Service from 1905 to 1910.

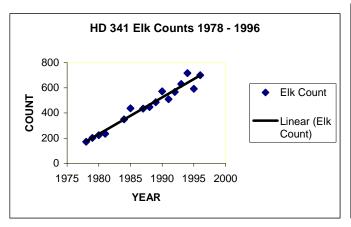
Despite the various methods employed to select timber for harvest, the end result of each was that large tracts of lodgepole pine forests in the Mount Haggin area were clear-cut at least once, some areas more often, at some point throughout the past century. What we see today is the residual effect of those logging practices – large stands of densely packed, even-aged lodgepole pine that lack the variety of understory vegetation and structural diversity that provide forage and shelter to game and nongame species; reduce the potential for multi-aged conifer establishment due to intense competition for sunlight, soil and water resources; and enable large-scale infestations and disease outbreaks to occur due to the density of trees in the stand. The conifer forest health treatment areas in this project fit this description.

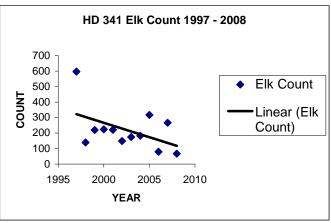
## 3.2.5 Wildlife

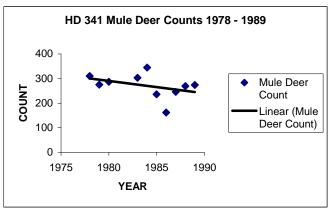
The Mount Haggin Wildlife Management Area was established in 1976 in part to provide year-round habitat for wildlife, emphasizing elk, moose, and mule deer. Other species that are known to use the management area permanently, seasonally, or occasionally are: antelope, black bear, wolf, mountain lion, white-tailed deer, grizzly bear, bobcat, beaver, pine marten, wolverine, various bird species, a variety of amphibians, and a variety of small mammals.

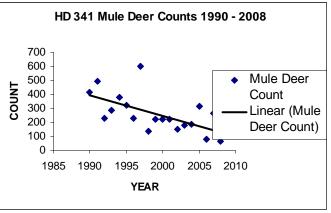
Aerial surveys of the winter range in Hunting District 341 have been flown annually since 1978 in order to determine trend in elk and mule deer populations on the WMA. From 1978 through 1997, elk populations in HD 341 increased, then began to decline from 1998 through 2008. The mule deer population in HD 341 decreased slightly from 1978 through 1989, but has been declining at a greater rate since 1990.

Frisina et al. (2006) contrasted winter diets of mule deer and elk and related them to population trends of both species on the Mount Haggin WMA. Research found that the same five browse species comprised 95% and 52% of the mule deer and elk winter diets, respectively. These plant species were antelope bitterbrush, Oregon grape, Rocky Mountain juniper, Douglas fir, and lodgepole pine. The diet similarity between elk and mule deer indicates the potential for competition between these species. Because elk have a more varied diet (55% browse, 33% grass, 12% forbs) than mule deer (97% browse 2% grass, 1% forbs) on this winter range, it is likely mule deer would be more negatively impacted. In fact, the decline in mule deer trend between 1990 and 1996 with a concomitant upward trend of elk through 1996 indicates competition may have been occurring. Douglas fir and lodgepole pine are both considered a low value browse for elk and mule deer (Kufeld 1973) yet during this study, these species contributed 8% and 3% respectively, to the diet. The relatively high contribution of low value browse to the winter diets is a further indication that the combined populations of mule deer and elk may be exceeding habitat carrying capacity, possibly due to the loss of valuable browse species such as bitterbrush and aspen.

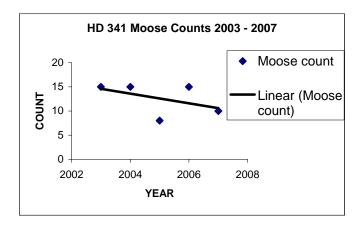








Moose occur year-round on Mount Haggin WMA, including that portion that lies within Hunting District 341. During annual winter aerial surveys of HD 341, eight to 15 moose have been observed during the period 2003-2007. Because they consume mostly browse, moose in this area of Mount Haggin WMA are heavily associated with wet areas predominated by aspen and willow with nearby conifer stands for security.



#### 3.2.6 Aesthetics

From the Deerlodge Valley and Fairmont Hot Springs Resort, Mount Haggin WMA's mountainous landscape is a carpet of green pine and fir trees, with an increasing number of visible pockets of rust colored beetle-killed lodgepole pine. Its foothills are primarily covered with grasslands with fingers of conifers, sagebrush, and other shrubs, such as bitterbrush, rabbitbrush, and potentilla, covering the lower elevations.

The proposed aspen and bitterbrush treatment areas are all visible from either the Beal Mine Haul Road or the Willow Creek Road, with the exception of the German Gulch bitterbrush site, which is visible from the German Gulch foot trail.

In areas of forest affected by the infestation of the mountain pine beetle, pine needles appear in shades of red and brown, denoting a dying or dead tree. Such areas are visible from various vantage points in and around the WMA.

## 3.2.7 Cultural & Historic

As previously noted, portions of Mount Haggin WMA have been affected by the mining and logging industries in the late19<sup>th</sup> and 20<sup>th</sup> centuries. Some remnants of these activities, such as flumes, logging roads, and placer mining, remain scattered along the German Gulch drainage and other sites within the WMA. In addition to those relatively recent activities, the presence of ancient peoples using the area also remains in the form of lithic scatter.

There are no known culturally or historically noteworthy sites within the targeted areas proposed for habitat restoration.

## 3.2.8 Recreation

The WMA provides the public with year-round recreation opportunities such as hunting, fishing, hiking, cross-country skiing, snowmobiling, and wildlife viewing.

Mount Haggin WMA encompasses parts of Hunting Districts 319 and 341. All of the locations for the proposed habitat restoration are located within Hunting District 341.

In winter, snowmobiling, cross-country skiing, and other forms of winter recreation is permitted within the Mount Haggin WMA on the east side of the Continental Divide only. Otherwise, the rest of the WMA is closed during the winter in order to provide security for wintering big game species.

### 3.2.9 Health Risks/Hazards

Since one of the methods FWP currently uses to manage noxious weed infestations is chemical means, there is the potential for spillage to occur. However, only trained and licensed staff or contractors may apply the herbicides to specified areas within the WMA to decrease the chance of negative consequences to native vegetation.

Due to the traffic associated with the Beal Mine clean up, traffic does occur on the haul road within the proposed project area. Visitors to the WMA need to be mindful of vehicles and equipment along this road.

## 3.2.10 Community Resources

Adjacent to the northeastern portion of the WMA are a handful of private residences, agricultural lands, and Fairmont Hot Springs Resort.

The Beal Mine Haul Road is maintained to provide year-round access to the Beal Mine, which lies south of the WMA. Willow Creek Road is also maintained to provide access to public lands on the WMA.

## 4.0: ENVIRONMENTAL CONSEQUENCES

## 4.1 Description of Relevant Affected Resources

## 4.1.1 Soil & Geologic

## Predicted Consequences of Alternative A

Often, logging efforts are completed in winter when the ground is frozen in order to minimize ground disturbance, compaction, erosion, and siltation. Since that portion of Mount Haggin WMA where the project is proposed to occur is closed in winter to provide security to big game on the winter range, timber removal will occur during the late spring and summer seasons. Subsequently, the ground will be susceptible to the establishment of new erosion patterns and compactions.

A short-term effect caused by the use of mechanical equipment to cut and transport trees to landings may lead to some soil instability. Ground disturbance will be mitigated by utilizing existing roads whenever possible; constructing new roads on moderate to low slopes; avoiding skidding straight up and down slopes; utilizing cut-to-length logging systems; using rubber-tired skidders; and avoiding areas with thin and sensitive soils. There will be no short- or long-term effects on the overall geologic substrate.

There is potential for short- and long-term effects on soil compaction and erosion. Landings and areas of slash accumulation are subject to soil compaction. To mitigate these effects, landings will be located where hardened sites currently exist, such as parking areas, old roadways, or other sites compacted adjacent to Beal Mine Haul Road. Existing roads will be used whenever possible to transport material. Designated skid trails would be mechanically raked and recontoured to diminish the effects of the restoration activities, if necessary.

Any disturbed areas will be reseeded with native grasses and forbs to reduce new erosion patterns from becoming established and moving sediment into nearby creeks. Additionally, the reseeding of disturbed areas will decrease establishment of noxious weeds into previously unaffected areas. Any invading noxious weeds will be managed through FWP's Integrated Noxious Weed Management Plan. All seed mixes will reflect those native species that currently exist on-site.

The installation of a temporary culvert to protect Gregson Creek will require a limited amount of groundbreaking activity in order to place it in line with the old logging road that will be used to provide access to the area targeted for the removal of beetle-killed lodgepole pine. FWP will obtain the necessary permits for this stream work and will meet the requirements of the Streamside Management Zone Law (MCA 77-5-301) that protects stream channels and banks and prohibits streamside activities that would diminish riparian habitat values.

No unique geologic or physical features have been identified in the project areas. Areas identified for treatment are similar to surrounding terrain found outside the unit boundaries.

## Predicted Consequences of Alternative B

If the No Action alternative were chosen, no disturbance to the current soil conditions would occur and old logging roads would not be reopened.

### 4.1.2 Air & Noise

## Predicted Consequences of Alternative A

Machinery used during the timber removal project will create noise and emissions. Additionally, the potential exists for creation of dust from cutting operations. This project will be completed during the late spring and summer when visitation to Mount Haggin WMA is moderate and scattered. The intrusion of noise from logging equipment will be taken into consideration and active habitat restoration work will be limited to daylight hours to minimize disturbance to potential campers and wildlife in the area. Contracted workers will be exposed to intermittent noise levels that will require the use of hearing protection. In addition to noise being generated by tree-removal activities, the movement of logging equipment and trucks in and out of the WMA will create additional traffic noise on Beal Mine Haul Road. All generated noise and emissions are temporary and will cease at the completion of the restoration activities in the fall.

Burning of slash will result in creation of smoke and temporary deleterious effects on air quality, which may affect the health of individuals and will be visible from Fairmont Hot Springs Resort and nearby vicinities. Any burning will occur during periods when conditions are suitable for good air dispersion. All applicable air shed or burning permits will be acquired before any burning takes place.

A secondary effect of conducting a forest removal project within the WMA's forest is the opening up of the canopy, which could lead to increases in ambient air temperature and increased wind movement. Due to the limited amount of acres involved in aspen and bitterbrush habitat restoration, the affect of removing encroaching conifers on temperature and air movement in those areas is considered minor. Since the quantity of lodgepole pine to be removed for the forest health portion of the restoration project is greater, the removal of trees in those treatment areas is expected to increase overall ambient air temperatures and wind movement within that local area. These changes are expected to have minimal negative impacts on the local wildlife populations in the area and will have positive impacts on the grass and forb community that will result once the forest canopy is removed.

#### Predicted Consequences of Alternative B

Ambient air quality and noise level would remain at the current levels if the No Action alternative were chosen.

## 4.1.3 Water & Fisheries

## Predicted Consequences of Alternative A

With any removal of vegetation and soil-disturbing activities in close proximity to water resources, there is the threat of erosion and sediment into those resources. With the proposed project, there may be a short-term increase in surface runoff across roads and trails that are used for skidding or transporting mechanical equipment.

The bitterbrush communities selected to receive treatment in this proposed project are on dry sites and not in close proximity to active creeks. The Clayton aspen treatment area is up-slope and adjacent to Whitepine Creek. Temporary access to that location will be established from Beal Mine Haul Road in such a way as to not impede the creek's flow or to increase sediment into the creek. Conifers to be eliminated from inside and around this site that are in close proximity to Whitepine Creek will be removed by hand, which will decrease the possibility of the establishment of erosion patterns that could affect the creek.

Designated skid trails will be located on the contours and along natural breaks, and will not go straight up and down the slope, thus minimizing the chance of overland flow of surface water. If erosion does occur on steeper slopes due to heavy rains, steps will be taken to reduce or mitigate that erosion through the use of straw waddles, netting, or other erosion barriers to limit runoff. All disturbed areas will be reseeded with appropriate native grass/forb seed mixtures to reduce chances for erosion.

Additional mitigations FWP will use to limit potential impacts to the waterways in the targeted areas will include: 1) installation of temporary plastic culverts to be removed at the end of the project; 2) the addition of gravel or logs in depressed wet areas in the roadways, 3) constructing new, temporary roads on moderate to low slopes and in strict accordance with Water Quality Best Management Practices for Montana Forests (Logan 2001); and 4) bringing existing logging roads built prior to the 1991 Streamside Management Act into compliance.

After the removal of the conifers within and around the aspen communities is completed, there is the potential for water yields in those areas to increase since aspen will no longer be competing with conifers for moisture. This increase in moisture will likely benefit other vegetation, as well as, streamside habitat and associated species.

## Predicted Consequences of Alternative B

The implementation of the No Action alternative would not change the supervision and management of the aquatic resources within the WMA. Fisheries biologist would continue to monitor creek health for the benefit of fish and amphibian species.

## 4.1.4 Vegetation

## Predicted Consequences of Alternative A

The cumulative effect of this project on the changes in diversity, productivity, and abundance of select plant communities is considered positive. For bitterbrush and aspen stands that receive the proposed treatments, it can be expected that individual plant health and vigor will improve after the removal of the encroaching conifers. With the improved condition of these stands, FWP expects there will be an increase in forage and cover available for ungulates and other wildlife, such as small mammals and birds.

In the forest health treatment areas, the effects of this project are expected to improve the health and vigor of the remaining lodgepole and Douglas fir trees by reducing tree density and therefore the competition for soil moisture and nutrients and the rapid spread of pest infestations or other diseases; provide better structural diversity to the forest by increasing the potential for regeneration and multi-age stands; reducing the risk of large-scale fire by reducing forest fuels; and minimizing the potential for large-scale jackpot piles of fallen dead lodgepole that will negatively impact wildlife movement and use in this area.

The forests on Mount Haggin WMA as a whole will not change a great deal from the proposed project since it only affects approximately 900 acres within the WMA's 58,000 acres. The diversity of tree species will not be negatively impacted because Douglas fir and lodgepole pine will still be plentiful throughout the WMA.

There is a possibility for the introduction of noxious weeds in disturbed soils as this project gets implemented. To prevent this, disturbed soils will be reseeded with appropriate native grasses and forbs upon completion of the project. In addition, all treatment areas will be actively managed for noxious weeds for five years post-project, under the guidance of FWP's Integrated Noxious Weed Management Plan. The reduction of knapweed near rehabilitated bitterbrush communities will be a positive adjustment in the landscape because often in areas where knapweed is established, the plant out-competes native grasses and forbs for soil resources. The elimination of knapweed near bitterbrush will assist in the restoration efforts not only of bitterbrush but other native vegetation as well.

## Predicted Consequences of Alternative B

If the No Action alternative were selected, the health of some of Mount Haggin WMA's aspen and bitterbrush communities would continue to decline due to increasing conifer expansion. The targeted aspen communities would likely move more to the third type of aspen communal health as described by Bartos, "decadent and falling apart", which would negatively affect wildlife reliant upon them for food and shelter.

As with aspen, the inability for bitterbrush to thrive and regenerate will reduce the forage and cover it can provide to ungulates and other wildlife species. Although there is no scientific evidence that knapweed has contributed to the decline of bitterbrush within the WMA, it is a competitor for resources yet does not provide an adequate forage replacement for bitterbrush for browsing wildlife.

Within a few years, it is reasonable to believe that all the lodgepole pine pole-size or larger on the winter range portion of the Mount Haggin WMA will be dead from mountain pine beetle infestation. This would greatly increase the fuel load in this area, which could contribute to large-scale wildfire. In addition, when millions of dead lodgepole pine trees begin falling over and creating jackpots of impassable debris, big game use and movement patterns in this area may be greatly impacted.

## 4.1.5 Wildlife

## *Predicted Consequences of Alternative A*

The proposed habitat restoration at the bitterbrush and aspen treatment sites are not anticipated to cause wildlife species any lasting negative affects because the work will be completed in a very limited area, the project is brief in duration, will occur during the summer when wildlife is less stressed, and wildlife can easily disperse from the treatment areas until the work is completed. After the completion of the project, FWP expects that the normal movements of wildlife into and through the restored areas will return to pre-project levels and patterns.

Overtime, as the treated aspen and bitterbrush communities gain vigor and increase in size, there is the potential that more wildlife will use those areas for forage and shelter. Although the combined acreage of the Gregson North, South, and Excaliner forest health treatment areas is relatively large (approximately 625 acres), its expected impact on overall elk security and cover across the winter range will be minimized by the fact that it is located in the heart of an essentially roadless area (except for old logging roads which are closed off to motorized traffic) and is heavily interspersed with Douglas fir and occasional stands of aspen, alder and willow, all of which will remain. Other effects on wildlife in the forest health treatment areas are expected. For example, the change in tree density may alter the diversity or abundance of bird species in those immediate areas. Cavity-nesting birds such as mountain chickadees and downy woodpeckers may decrease in local numbers while birds that benefit from forest openings, such as olive-sided flycatchers, may increase. Effect on the overall bird diversity or abundance in the area will be insignificant, however, since the bulk of Mount Haggin WMA's forests will remain intact. Douglas fir and other deciduous tree species that will be retained will continue to provide bat species with shelter and forage areas. The removal of a portion of the forest canopy will benefit wildlife by increasing the forage within the under-story plant community. Areas that provide significant thermal and bedding security or travel corridors for game animals would be left largely intact. No critical wildlife habitat will be affected.

Human activity associated with logging and rehabilitation would cause short-term increases in wildlife stress at the project sites. However, there exist large acreages of similar habitat in the surrounding area that wildlife can disperse to. This temporary displacement of animals during operations is not expected to have a significant impact.

#### Predicted Consequences of Alternative B

Under this alternative, FWP would continue to manage the WMA for the benefit of wildlife species, while providing opportunities for outdoor recreation for the public. Ungulate populations would continue to be monitored and hunting opportunities would be adjusted as needed. Carrying capacity of the winter range is expected to continue to decrease over time due to forest succession and conifer expansion.

The continued decline of important winter forage for ungulates (i.e. aspen and bitterbrush) within the WMA may influence elk, deer, and moose to move elsewhere, potentially onto nearby private lands. This transition may be of some concern to ranchers using their lands adjacent to the WMA for cattle grazing.

#### 4.1.6 Aesthetics

## Predicted Consequences of Alternative A

There will be temporary effects to visual quality during the course of logging operations. Conifer removal at the various sites will alter the current look to varying degrees for a particular area, based on the specified type of treatment. Where the removal of beetle-killed lodgepole is specified, more open environments with greater tree crown spacing will replace the densely packed forest. Because of the locations of the proposed treatment areas, some changes in the view of the mountains will be visible from the valley floor.

In the target areas where encroaching conifers are removed in and near aspen and bitterbrush communities, a more open landscape will be visible from nearby roads but the overall affect on the entire landscape is expected to be negligible.

Disturbance to grass and forb vegetation from these proposed restoration efforts would take one to three years to recover. In disturbed areas, seeding will occur with native grasses/forbs to lessen these impacts. Stumps will be cut to a maximum of 4 inches in height to lessen visual impacts and impediments to wildlife movement. Slash will be dealt with in various ways, depending on the treatment area.

## Predicted Consequences of Alternative B

If the No Action alternative were chosen, there would be a continued change in the appearance of the aspen and bitterbrush communities that had been chosen for the habitat restoration activities, as more conifers became established in these areas. In the conifer forest, the affects of the mountain pine beetle infestation would continue to be increasingly visible through the denotation of killed trees by their red coloration on the landscape.

## 4.1.7 Recreation

## Predicted Consequences of Alternative A

This alternative would be implemented during the summer and early fall seasons when the WMA is visited by hikers, campers, wildlife watchers, and hunters. The proposed aspen and bitterbrush habitat restoration work will require access to those areas be closed when active conifer removal is taking place. Additionally, visitors accessing the WMA and other private and public lands from the Beal Mine Haul Road and Willow Creek Road may be inconvenienced when logging trucks and other equipment used for the project are traveling on the roads. However, due to the short duration of activity, any negative impacts would be temporary and limited to a few months at best.

Some campers and hikers are likely to choose to use different areas with the WMA where extraction equipment noise cannot be heard and the natural sounds of the forest can be enjoyed.

Since it is expected that the proposed project will be completed by early fall, normal hunting activities within the WMA are likely to occur without interruption. The access road used for the removal of beetle-killed lodgepole pine will be blocked to motorized vehicles after the project is completed, but walk-in and horseback access will be permitted for hunting and other recreational activities. Logged units will provide both hunters and wildlife easier movement within those areas since the density of trees will be decreased.

After the completion of the proposed project, access to all treatment areas will return to their pre-project levels. The public will have the ability to explore and use those areas under Mount Haggin WMA's current management policies.

#### *Predicted Consequences of Alternative B*

The current Mount Haggin WMA's access and management policies will continue to be in effect. The public's access to the WMA for the pursuit of hiking, camping, hunting, and other recreational activities will go on as usual.

## 4.1.8 <u>Cultural & Historic</u>

#### Predicted Consequences of Alternative A

No effects on historical or cultural resources are anticipated. The State Historic Preservation Office (SHPO) has reviewed a description of the proposed project and a map identifying the locations of the habitat restoration sites. A file search by the Cultural Records Manager found that several previously identified sites had been recorded, especially in the vicinity of German Gulch. Based upon the work to be completed, SHPO felt that the likelihood of cultural properties impacted by the habitat restoration was low. If during the establishment of temporary new roads cultural or historic artifacts are discovered, SHPO will be contacted to ensure those sites are investigated properly.

## Predicted Consequences of Alternative B

FWP will continue to be proper stewards of the State's cultural and historic resources on state-owned lands per the requirements of state law 22-4-424 and 22-4-435.

## 4.1.9 Hazards / Risks

#### Predicted Consequences of Alternative A

This project would create temporary hazards associated with tree falling and equipment operation for material removal and rehabilitation. During the operational phase of this project, visitor access to the project area will be restricted with signing and barricades. Signs will be posted along Beal Mine Haul Road informing drivers to be watchful for logging trucks and equipment. Professional personnel, knowledgeable in safety practices and procedures to protect themselves, will be employed to carry out this project.

People with respiratory illness could experience a temporary health hazard resulting from smoke from slash pile treatments. However, when burning is necessary, it will occur when weather conditions are most favorable. All applicable air shed and burn permits would be obtained.

During the treatment for noxious weeds, herbicide application would create minor, temporary hazards. Herbicide application will be conducted by state-certified applicators and would follow all pertinent laws and restrictions.

The vehicles utilized during the timber operations use various petroleum distillates. Care will be taken to prevent spills. If any significant spills occur, soils saturated with oils will be removed.

There will be a positive impact through the lowering of risk of large-scale stand-replacement wildfire due to reduction of fuels in the project area.

## Predicted Consequences of Alternative B

With the implementation of a No Action alternative, FWP would continue to manage noxious weeds within the WMA per the guidance of FWP's Integrated Noxious Weed Management Plan. The application of herbicides would be conducted by state-certified applicators and would follow all pertinent laws and restrictions.

The persistence of the mountain pine beetle infestation within the WMA's forests will continue to kill lodgepole pine, which will add to the existing fuel load within the forest and increase the risk of large-scale piles of fallen dead trees that could greatly impact wildlife movement and use in this area. In addition, standing dead trees have the potential to pose a public safety hazard to hikers, hunters, and other recreationists in this area in the event that they fall or get blown over.

Although no major forest fire has occurred within the WMA since the 1920s, the potential exist for a large-scale stand replacement fire due to the weakened health of existing conifers and the high fuel levels.

## 4.1.10 Community Resources

## Predicted Consequences of Alternative A

A temporary increase in industrial/commercial traffic would be associated with this project. Logging trucks and equipment would be active in the area. The project will occur during the summer, so some visitors will likely be inconvenienced by additional traffic from logging vehicles on Beal Mine Haul Road and Fairmont Road to access Interstate 90. Appropriate traffic and hazard signing will be used to minimize conflict during the implementation of the project.

Local residences and the Fairmont Hot Springs Resort are not expected to be impacted by the habitat restoration projects, since work will be localized and the project period is short in duration.

Predicted Consequences of Alternative B

There would be no change in the community resources bordering the WMA if the No Action alternative was executed. The traffic patterns would remain at their normal levels and local businesses would continue to exist.

#### 5.0 MONITORING & LONG-TERM MANAGEMENT

As part of the habitat restoration plan, FWP's wildlife biologist will work with the contracted forester to implement the plan and oversee necessary treatments to mitigate the affects of the conifer extraction in the treatment areas.

To monitor the effects of the proposed treatments in the bitterbrush, FWP has established permanent vegetation monitoring stations and photo plots in four of the five treatment areas. Pre-treatment measurements and photos were taken during summer 2008. Photos will be retaken annually while measurements will be retaken every five years thereafter. In order to monitor the effects of conifer removal from select aspen stands, FWP will establish permanent photo plots in the stands to be treated. Pre-treatment photos will be taken prior to the start of logging in June 2009. Photos will be retaken every year thereafter. To monitor the effects of the lodgepole pine removal from the conifer forest in order to improve forest health, FWP will monitor winter use of the logged areas by elk, mule deer, and moose during annual winter aerial surveys of the winter range. In addition, use of the logged areas by big game, small mammals, and birds will be monitored from the ground by using the logging roads as a transect of use. The transect will be monitored at least once during the winter and once during the summer for at least 5 years post treatment. Scat piles and tracks intersecting the transect will be identified and counted. Birds detected along the transect will also be identified and counted.

New growth on aspen (suckers) is very palatable to elk, deer, and moose and those aspen communities targeted in this project are likely to come under browsing pressure from those species. However, we expect browse pressure to be dispersed across all aspen stands in this area. The overall result should be an increase in overall health and stem recruitment of the aspen communities.

Periodic habitat maintenance is not expected to be required in any time interval less than 20-30 years, if the proposed project occurs as planned and the aspen and bitterbrush communities respond as anticipated.

## 6.0 POTENTIAL LONG-TERM CONSEQUENCES

Over time, it is logical that winter range conditions would improve in ways beneficial to big game. As a result, elk, mule deer and moose populations could increase. Although there are other factors affecting big game populations, such as weather conditions and hunter harvest success, in simple terms results of this project could increase carrying capacity of the winter range. If a noticeable increase in big game resulted from these habitat restoration efforts, there would be a corresponding increase in wildlife watching opportunities and could be a corresponding increase in hunting opportunity that follows.

With the removal of select dense, even-aged stands of beetle-killed lodgepole, there is the potential to see several long-term consequences. First, the structural diversity of the forest will increase over time by removing even-aged stands and creating more of a mosaic of forest patches. This will benefit small mammals such as snowshoe hare, pine marten, and a variety of bird species. Reducing the density of trees will help to slow the spread of mountain pine beetle. Removing stands of dead and dying trees will help to reduce the fuel load in the forest and will also help to minimize the potential for large piles of downed timber that would impact wildlife movements and use in this area.

## 7.0 PUBLIC PARTICIPATION AND COLLABORATORS

## 7.1 Public Participation

Presentations on the proposed habitat restoration project are being offered to area community-based groups, including County Commissions for Deer Lodge and Silver Bow Counties, Anaconda Sportmen's Association, Skyline Sportsmen's Association, and the Mile High Backcountry Horsemen's Association.

The Commissioners of Butte-Silver Bow and Anaconda-Deer Lodge Counties have been contacted about the proposed project and are supportive of FWP's efforts.

The public will be notified in the following manners to comment on this current EA, the proposed action and alternatives:

- Two public notices in each of these papers: *The Montana Standard* (Butte) and *The Independent* (Anaconda);
- One statewide press release;
- Direct mailing to adjacent landowners and interested parties; and
- Public notice on the Fish, Wildlife & Parks web page: <a href="http://fwp.mt.gov">http://fwp.mt.gov</a>.

Copies will be available for pubic review at FWP Region 3 Headquarters and at the FWP Butte Area Resource Office.

This level of public notice and participation is appropriate for a project of this scope.

The public comment period will extend for (30) thirty days. Written comments will be accepted until 5:00 p.m., 20 February 2009 and can be mailed to the address below:

Mt. Haggin WMA Habitat Restoration Project
Montana Fish, Wildlife & Parks
Butte Area Resource Office
1820 Meadowlark Lane
Butte, MT 59701 or email comments to: vboccadori@mt.gov

## 7.2 Collaborators - Other Agencies/Offices that Contributed to the EA

Montana Department of Fish. Wildlife & Parks

Fisheries Division Legal Bureau Parks Division Wildlife Division

Montana Department of Natural Resources and Conservation

Montana State Historic Preservation Office

USDA, Natural Resources Conservation Services – Soil Survey

#### 8.0 ANTICIPATED TIMELINE

Public Comment Period of EA: late-January through late-February

Decision Notice: Late-February

FWP Commission Approval: Mid-March

Request for Proposal (RFP) for Licensed Forester Published:

Mid-March

Initiation of Project: Mid-May (depending upon road conditions)

Completion of Project: Late September 2009

#### 9.0 DETERMINATION IF A ENVIRONMENTAL IMPACT STATEMENT IS REQUIRED

Based upon the above assessment, which has identified a limited number of minor impacts to the physical and human environment that will be either for a short duration or that the affects of the propose project can be mitigated below the level of significance, an EIS in not required and an environmental assessment is the appropriate level of review.

The permanent removal of a limited number of lodgepole pine and Douglas fir will not diminish the variety of conifers that can be found with the Mount Haggin Wildlife Management Area nor be detrimental to the wildlife existing there. As described in the previous sections of this EA, the proposed project will be affecting approximately 950 acres of the 58,000 acres the WMA encompasses. All disturbed terrestrial areas will be groomed and reseeded with local native vegetation so actions needed to remove conifers will not leave a lasting imprint on the landscape of the WMA. The brief duration and targeted approach of the habitat restoration plan will limit the impacts to wildlife and in the end, wildlife will benefit from the improved selection of forage.

## 10.0 EA PREPARERS

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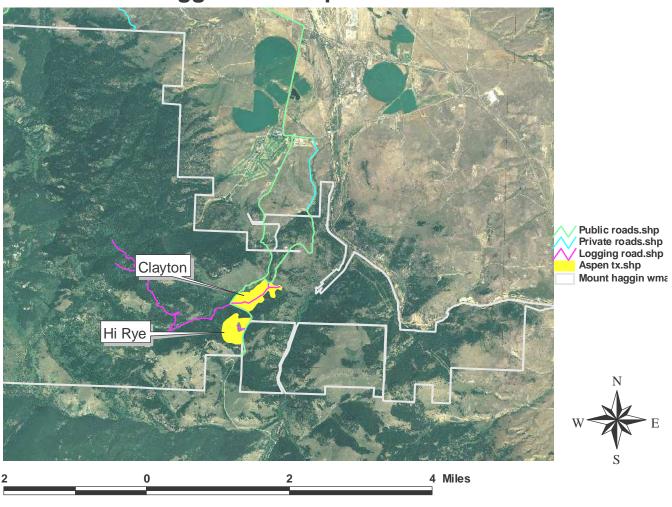
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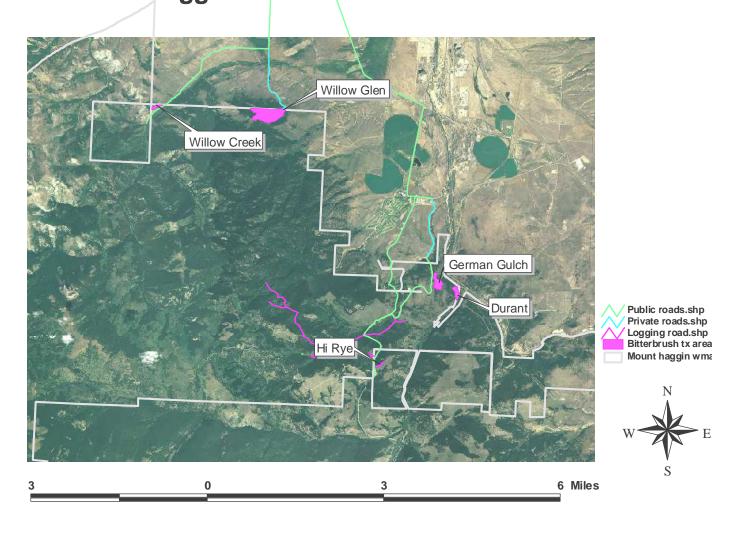
## **APPENDIX A, 1 of 3: Aspen Treatment Areas**

# Mt. Haggin WMA Aspen Treatment Areas



## **APPENDIX A, 2 of 3: Bitterbrush Treatment Areas**

# Mt. Haggin WMA Bitterbrush Treatment Areas



# Mt. Haggin WMA Forest Health Treatment Areas

